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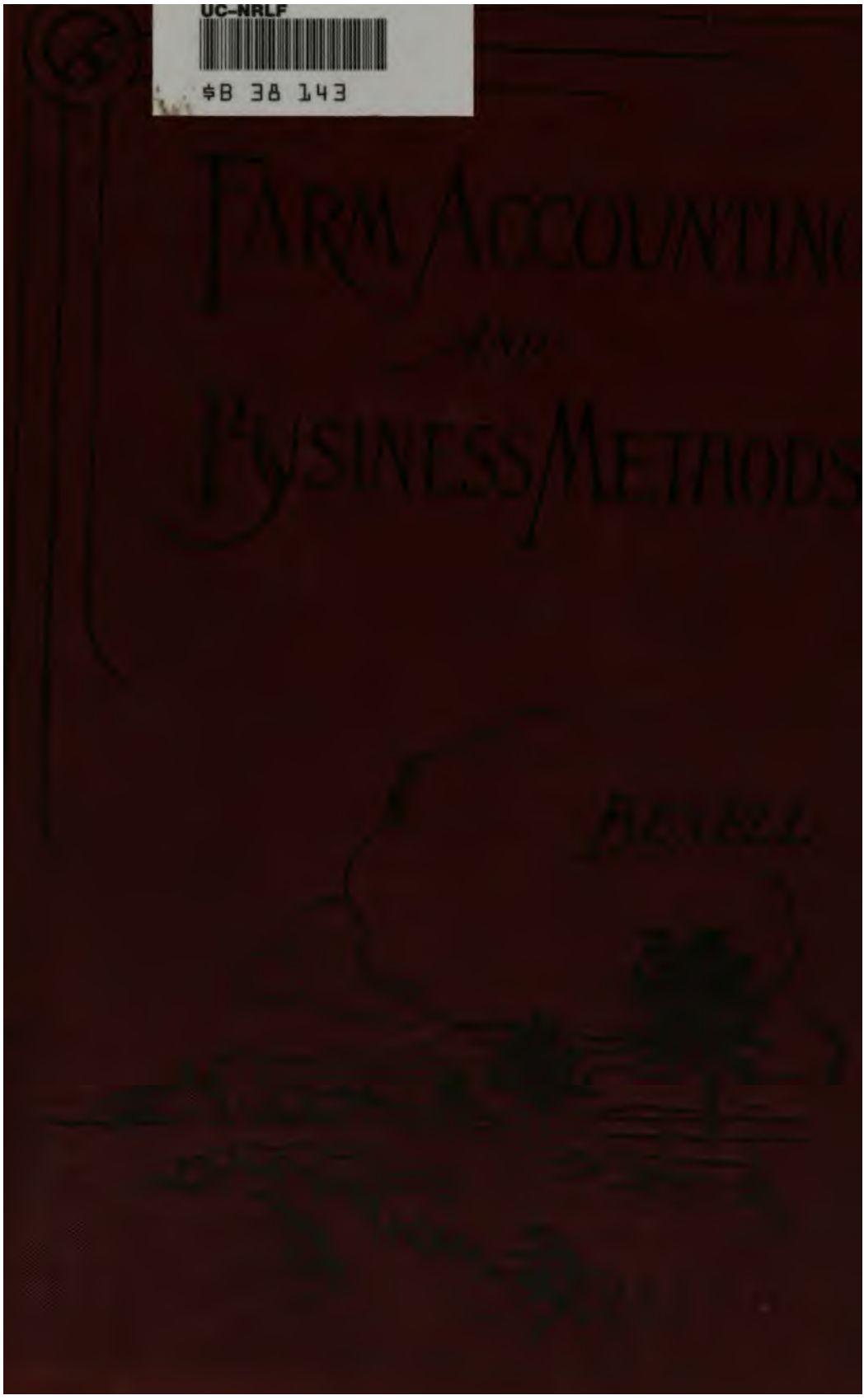
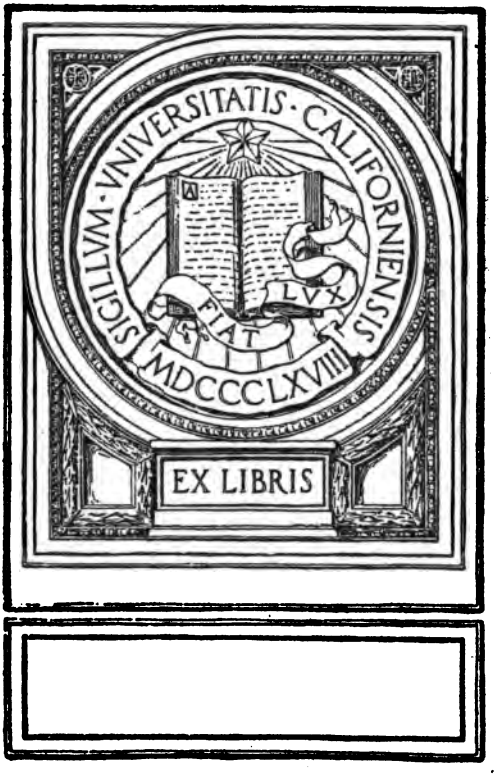
FARM ACCOUNTING AND BUSINESS METHODS

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Farm Accounting and Business Methods

A TEXT-BOOK FOR STUDENTS IN AGRICULTURE AND A MANUAL FOR HOME-STUDY

BY

J. A. BEXELL, A.M.

DEAN SCHOOL OF COMMERCE

OREGON AGRICULTURAL COLLEGE

THE HOME CORRESPONDENCE SCHOOL

Springfield, Mass., U. S. A.

1911

CORRECTIONS AND SUGGESTIONS

NOTE TO THE STUDENT:—Make all corrections and read suggestions before beginning work.

Page 30. Under written work, after the word "illustrations," add: April 1, Cash on hand, $170.00.
" 34. Line 4, Surrey, should be $165.00 (not $130.00); Light Buggy, $85.00 (not $50.00).
" 47 and 48. The illustrations should be dated 1910.
" 48. Total Stock, in illustration, should be $4421.77; Profit, $452.74.
" 50. The "Net Worth last Year" for both Statements No. 3 and 4 is taken from the Net Worth in Statement No. 2.
" 53. March 30, strike "Personal column."
" 55. Third line. The Productive Investment is $6,265.54 (not $6,265.64).
" 59. April 17, Laundry 95 cents (not 97 cents).
" 63. March 1, Tea (not Codfish) 35 cents.
" 80. June 18, 250 (not 25) bu. Corn @ 74 cents.
" 80. June 22 10 tons Timothy @ $15.50 (not $15.00).
" 80. June 23, Collection and Exchange $3.50 (not $3.40).
" 83. Paragraph 3, third line, June 1 (not July 1).
" 85. The Corn Inventory is too large by 525 bushels, if you deduct the sales from the purchases, but the 748 bushels should be used to get the results given on pages 82 and 86.
The Net Gain, with the given inventories, for each partner is $29.75.
" 86. Richard (not Robert) Morris, Henry Simmons, and Western Produce Co. should be placed in the left column, (Resources).

BY J. A. BEXELL

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BY THE HOME CORRESPONDENCE SCHOOL

Ruled Blank Books

with printed headings for use in writing out the exercises, or for practical use on the farm, may be obtained from stationers generally or from The Home Correspondence School, Springfield, Mass.

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PREFACE TO THE FIRST EDITION

There are a number of works on Farm Accounts now on the market, but I have found none adapted to the class room. An arithmetic would be useless as a text without problems for solution; a text on Farm Records is likewise useless in the class room without exercises for practice.

My aim has been to make the exercises as practical and simple as possible, but no attempt has been made to limit the illustrations to actual experience on any particular farm. Hence, both prices and results will probably vary considerably from actual practice, a fact which will not reduce their illustrative value. The forms suggested contain many new and labor-saving features, conforming with the best modern business practice. A resourceful teacher will be able to supplement the exercises to any extent to suit the time available and the needs of his class.

The increasing interest shown in this subject warrants the belief that it will be introduced into the public schools in the near future, and surely there is no subject more worthy of attention or more sadly neglected. Suggestions and criticisms from farmers and teachers interested in the subject will receive careful consideration in a future edition.

J. A. BEXELL.

Oregon Agricultural College
October 1, 1909

PREFACE TO THE SECOND EDITION

A large number of inquiries from schools of all grades have confirmed my conviction that there is a growing demand for a text-book in Farm Accounts. Such a text-book must be teachable. Without a well graded set of exercises to place before the student it would be as useless in the class room as an arithmetic without problems. Many new exercises have been suggested by readers of the first edition and it is believed that the present volume offers a fairly satisfactory course. Ruled and printed forms have been provided for the exercises in bookkeeping and these forms are also suitable for actual bookkeeping on the farm. Chapters have been added on Business Forms, Business Correspondence, and Business Organizations—subjects of the utmost importance to every student; and it is hoped that the added chapters will make the book more valuable as a business manual.

The fundamental principles of accounting being the same in every business, it has been found that the exercises are equally adapted to classes in Mechanic Arts, Domestic Economy, etc., so that the special exercises for this class of students have been omitted.

A syllabus of instruction sheets has been prepared for students who desire to pursue the study at home, which is also available to schools giving correspondence courses.

I take this opportunity of thanking all who have contributed in any way toward the improvement of this effort to help the farmer. Special acknowledgment is due Mr. E. B. Moore for his excellent chapter on "The Business Letter."

J. A. BEXELL.

Oregon Agricultural College
October 1, 1910

FARM ACCOUNTING AND BUSINESS METHODS

CHAPTER I

INTRODUCTORY

It is a truism to say that the financial side of farming is of the utmost importance. But the fact remains that this side of the world's greatest industry is almost entirely neglected by both the farmer and the schools. Professor Bailey says on this subject: "In visiting practically every farm in one of the counties of the state (N. Y.) we did not find one man who knew how much it cost him to produce milk or to raise any of his crops."

Prosperity of the Farmer

The Secretary of Agriculture, in recent Year Books, points out the remarkable prosperity of the farmer; that the export of farm products is vastly in excess of all other exports combined; that a million agricultural debtors have been transformed during the last ten years into the same number of surplus depositors; that "contrary to his reputation, the farmer is a great organizer, and he has achieved remarkable and enormous successes in many lines of economic co-operation in which the people of other occupations have either made no beginning at all or have nearly, if not completely, failed." He points out that most farmers live better than the average merchant or mechanic.

Causes of Success

It is doubtless true that the farmer is becoming a factor to be reckoned with in the business world; that the average farmer knows vastly more about scientific farming than his father did; he understands more thoroughly the value of proper cultivation, of fertilization, of rotation of crops, and of diversified farming; but it cannot be said that he owes

his success to improved business methods. He has been successful, rather in spite of his ignorance in this respect, and because of the lavish generosity of mother nature.

Two Phases of Farming

The business of farming assumes two distinct phases: the productive phase and the exchange phase. The one aims to extract the treasures from the soil; the other, to place them in the hands of the consumer. It is important not only to raise abundant crops, but also to sell the products to advantage.

Importance of the Exchange Phase

The importance of the exchange phase is often lost sight of. A farm may be forced to yield to its maximum capacity, labor may be managed properly and waste reduced to a minimum; and yet the net result may be a loss at the end of the year. As a general economic proposition, it might be said that large crops often result in serious loss to society as a whole. If the net value to the consumer is less than the labor and capital expended on the crop, society is the loser by the difference. Hence the importance of a thorough understanding by the farmer, as well as by the merchant and manufacturer, of the laws and methods of exchange or commerce.

Farming a Paying Business

That farming is a science has been emphasized so much that the fact that it is also a business is often lost sight of. It is a real business, and one which pays the United States close to eight billion dollars annually. It has been demonstrated repeatedly that no legitimate business pays better than farming. It may be a little more uphill work at the start, since most farmers begin business with small capital, but it is incomparably safer in the long run, and will insure a competence for old age with greater certainty than any other occupation. But let it ever be borne in mind that the condition for success is that *farming must be conducted on business principles.*

Importance of Keeping Accounts

Accurate records and accounts are absolutely necessary in the management of every business enterprise, great or small.

No business can be successful in the long run unless its condition can be determined at any time, and no conservative business man will fail to prepare a financial statement at the end of his fiscal year. He must determine how he stands, not only with others, but with himself.

One object of keeping accounts is to assist in accumulating property. Another important object is to record a continuous history of business transactions for future guidance. Not only is this profitable, but it is a source of real pleasure and satisfaction to know our standing with those with whom we deal as well as the profits and losses in our business enterprises.

What the Records Should Show

A complete system of farm records should enable the farmer to tell at any time how his business stands with himself and others; the cost of production of staple crops and live stock, and the periodical results of both the productive and the exchange phase of his operations. The records should also show personal and household expenses, and finally a comprehensive history of the various phases of the enterprise, including plots of crop rotation, fertilizing, etc.

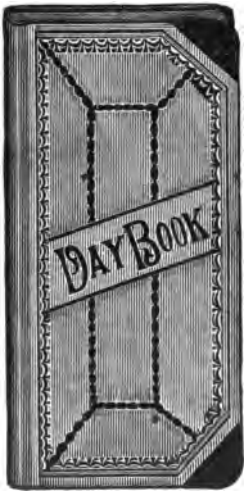
Difficulties of Farm Bookkeeping

Numerous systems of farm bookkeeping have been proposed, but the trouble with them all is that they are either too complicated or altogether unpractical. Professor Bailey says: "The entire subject of farm accounting must be attacked in a new way. The ordinary bookkeeping will not apply." The reason is obvious. Farming is a much more complicated business than most people suppose. A farmer is both a producer and a dealer. He needs financial records as complete as those of the average merchant and cost records as accurate as the manufacturer's. But the records must be adapted to the business in hand. The farmer is usually a very busy man. His chief difficulty is neither ignorance nor indolence. He has little time for fancy bookkeeping and still less for "red tape." What he wants is a plain, simple, straightforward history of his business, so arranged and classified as to require the minimum effort to keep it up. It may be inter-

esting for his children to learn the conventional use of red ink, rulings, closing of books, the intricacies of journalizing, etc., but all this is not necessary to a proper understanding of farm bookkeeping.

Methods of Bookkeeping

In the following pages I suggest three methods of farm bookkeeping whereby the yearly profit or loss may be determined and compared from year to year. The first is extremely simple Single Entry; the second method is a comprehensive, but very simple, Modified Double Entry, by which the financial standing, the cost of production, profits and losses, etc., can be ascertained at any time; the third is a system of complete Double Entry, generally used in enterprises doing an extensive credit business. Any farmer with average intelligence will be able to master either method with small expenditure of time and labor.



PART I

FINANCIAL ACCOUNTS

First Method

Being the simplest form of single entry, employing only one book, which may be purchased anywhere. (See page 10.)

FINANCIAL ACCOUNTS

CHAPTER II

SINGLE ENTRY, THE SINGLE-BOOK SYSTEM

The Day Book

The most important record in this method of bookkeeping is the *Day Book,* or what might properly be called the *History of the Farm.* This should be written in the form of a diary, without attempting a close classification of the entries. Always bear in mind, however, that it is safer to give too much rather than too little information in the records. The Day Book should contain any memoranda which might prove valuable for future reference. Conditions of the weather, time of planting, breeding, division of fields, sales, purchases, loans, attendance at conventions, valuable recipes, etc., are proper subjects for entry. Though it is advisable to keep the book as neat as possible, it is unnecessary to spend much time for that purpose. It is more convenient to jot down items in lead pencil as they come along, and then, as time allows, classify them under their respective heads.

The Day Book and Cash Book Combined

In the form on page 19, the Day Book and Cash Book are combined. The ruling is that of an ordinary stock Day Book. In the left-hand column are entered all sums received and in the right-hand column all payments.

While the combined Day Book and Cash Book has the advantage of extreme simplicity, it is often more satisfactory to devote a part of the Day Book, or a separate book, exclusively to cash transactions. Where this plan is followed, it is unnecessary to record all the cash items in the Day Book. The left-hand page is used for cash receipts and the opposite page for payments.

Bill and Receipt File

A very important part of the farm records is the Bill and Receipt File. A part of the Day Book can be devoted to that purpose, but it is better to provide a separate book. In it should be securely pasted all bills for machinery, implements, tools, live stock, nursery stock, furniture, etc., which will be subject to inventory, but not bills for supplies, feed, table expenses, etc.; also receipts for the payment of money, canceled notes, certificates of pedigree, important clippings from periodicals, and any other matter of interest. This will prove an invaluable record for future guidance. (See illustration, page 24.) Many prefer the Pocket File, illustrated on page 16.

The Inventory

The inventory may be considered the foundation of the farm records, because without it no results at all can be obtained. It should be taken at such a time as will give the most accurate results with the least expenditure of labor. This differs widely in different localities. January 1st seems the most natural beginning of the fiscal year, but the objection is that at this time there is apt to be a large quantity of feed and supplies on hand. April 1st would be a better date so far as the stock on hand is concerned, but inconvenient in many localities on account of the pressure of spring work. Whenever it is taken, it should be accurate. No guesswork should be tolerated. Weigh and count; do not estimate. Then assign the actual market value to the property, taking due account of depreciation.

Depreciation

Neither an old wagon nor an old horse is worth as much as new ones. The same holds true with very few exceptions of all equipment, animals, houses, and improvements. The question as to what rate shall be charged off annually, so as to create a sinking fund with which to renew the depletion, has been an open question with accountants since time immemorial. It is particularly difficult to determine the depreciation of live stock, work horses, and depletion of the fertility of the soil. Without entering into a discussion of the subject, I

give below the experience and opinion of the best authorities on the subject. The thoughtful farmer will find no difficulty in adjusting these rates to suit his conditions. For the purpose of general estimates, the following rates on the cost or market value are fairly accurate:—

Buildings (including insurance and repairs).... 5 per cent.
Horses, above 5 years.....10 per cent.
Milch cows (after 3d year)..... 8 per cent.
Machinery and tools.....10 per cent.

How to Determine the Profits

The all-important question at the end of each year is: Has the work for the year been a financial success or failure? To determine the profits or losses is, therefore, a problem to be solved each year. As a matter of fact, it is a very simple problem, and it becomes easier the oftener it is done.

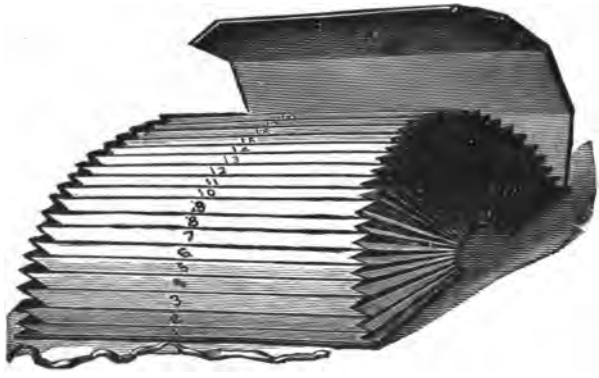
Let us assume that heretofore you have kept no books whatever, but you have now decided to make a start. You have procured a simple, substantial Day Book (may be purchased at any stationery or drug store) and, after listing all your property, you are prepared to make the entries shown in the illustration. April 1st is selected as the beginning of the fiscal year, because on that date the supplies, grain, feed, etc., are usually low, and the average farmer has considerable time to spare. Of course, this varies in different localities, and any other date may be adopted to suit the farmer's convenience. The proper opening entries, including the inventory, are shown on page 18.

A Year Later

At the end of the year we are ready to determine the result of the year's work. If we have kept only memoranda in the Day Book, the best we can do is to take another inventory exactly similar to the last one. It is evident that the difference between what we are worth now and our net worth last year will be the net gain. The second financial statement and the statement of Profit and Loss are illustrated on page 20.

Net Earnings

The net profit shown in the illustration, page 20, includes the interest on the investment and the wages of the members of the family. To find the net earnings of the proprietor, the value of the household goods, life insurance, cash, and the cost of the dwelling should be deducted from the last year's inventory. Then find the interest on the remainder at a fair rate; this deducted from the profit gives the earnings of the family. It can be apportioned in any way the proprietor sees fit. This is illustrated further in Lesson 11. If members of the family, engaged in productive work, receive regular pay before the statement is made, the final result is the net profit above wages and interest. The question might be asked: why deduct the value of the dwelling before the interest is taken? The reason is that the dwelling is not a productive investment. It is apt to be more or less valuable than the average standard, according to the taste and ability of the owner. Amounts drawn for personal use should, of course, be added to the net earnings.



ALPHABETICAL BILL FILE

Continued Inventories

Items	Memo.	Ap. 1, 08	Ap. 1, 09	Ap. 1, '10	Ap. 1, '11
Farm, 160 A.	Market Val.	8000	8620		
Corn		100	82 50		
Oats		67 50	75 25		
Wheat		170	220 11		
Hay		120	130		
Vegetables		50	40		
Total	Produce	507 50	547 86		
Horses	See special	600	750		
Cows	schedules	800	924		
Steers	"	132	182		
Heifers	"	55	44		
Hogs	"	72	66		
Sheep	"	300			
Total	Stock	1959	1966		
Poultry		83 25	100		
Mach. & Impl.		625	849		
Supplies		25	30		
Household Goods		350	650		
Life Insurance, Paid up		964 36	1073 40		
Cash		170	126 04		
Total Resources		12694 11	13962 30		
Labor		75	85		
Accounts Payable		125 15	342 32		
Bills Payable		3000	3200		
Total Liabilities		3200 15	3627 32		
Net Worth		9483 96	10334 98		

CONTINUED INVENTORIES

Day Book. Apr. 1 1. 1908

Six years ago to-day I purchased my present farm investing cash $6000.00. Following is an accurate inventory of all my property and a statement of my affairs as they stand to-day

Financial Statement No 1 Home Farm
April 1. 1908
Resources

Farm, 160 A. (market value)				8000
Produce:				
200 bu. Corn	50	100		
150 bu. Oats	45	67 50		
200 bu Wheat	85	170		
20 tons Hay	6 00	120		
Potatoes and Vegetables		50		507 50
Stock.				
6 Horses, average	100 00	600		
20 Cows "	40 00	800		
11 Steers "	12 00	132		
5 Heifers "	11 00	55		
12 Pigs "	6 00	72		
100 Sheep "	3 00	300		1959
(Remainder of Resources omitted)				10853 25
Life Insurance (Paid-up value)				964 36
Cash				170
Total				12684 11
Liabilities				
Labor unpaid		75		
Accounts Payable		125 15		
Mortgage due April 1 1910		3000		3200 15
Net Worth				9483 96

OPENING ENTRY AND INVENTORY

Day Book, April, 1908.

			Received	Paid
Mond.	1	Cash on hand	170	
	1	Heavy rain storm Shoes Cap and Maud 2 Tons Coal		3 8
Tues.	2	Attended Breeders' Convention at Portland. Program and report File #16. Expenses		8 40
Wed.	3	Paid grocery bill at Murdocks Bill on file. #16		11 40
Thurs.	4	Bought mulch cow of J.C. Smith		40
	4	Attended Concert of the Boston Jubilee Singers with family		2
Frid.	5	Sold calf to P.A. Anderson	7	
		1 pair Gloves		1 50
Sat.	6	Bought for cash 10 lb 1ns, Hammer 45¢, Nails 50¢		1 95
	6	Went to Portland to select implements, Expenses		3
Sund.	7	Dr. E. Hamilton preaches on "Civic Honor" Collection		25
Tues.	9	Shoes for Teddie		3
		Forwarded	177	87 50

DAY BOOK

Financial Statement No. 2, April 1, 1909

Resources				
Farm, 160 A (market value)				8620
Produce				
Grain 150 bu. Corn	.55	82.50		
175 bu. Oats	.43	75.25		
253 bu. Wheat	.87	220.11		377.86
Hay 20 tons Clover	6.50			130
Potatoes & Vegetables				40
Stock				
6 Horses average	100.00	600		
1 3-year old Horse Jim		150		
22 Cows average	42.	924		
14 Steers "	13.	182		
4 Heifers "	11.	44		
11 Hogs "	6.	66		1966
Poultry				
165 Chickens	.45	74.25		
25 Turkeys	.75	18.75		
10 Geese	.70	7		100
(Remainder of Resources omitted)				2602.40
Cash & Bank				1200.4
Total				13962.30
Liabilities				
Labor (unpaid)		85		
Accounts Payable		142.32		
Mortgage, due April 1, 1910		3000		
Note, favor Western Lumber Co.		200		
Due on Piano		200		3627.32
Net Worth				10334.98
Statement of Profit & Loss				
Net Worth now		10334.98		
Net Worth last year		9483.96		
Net Profit				850.02

SECOND FINANCIAL STATEMENT

Personal Accounts

A farmer frequently retails his products to his neighbors or to townspeople, if he lives near town. In such cases it often happens that he can sell to better advantage by running an account with steady customers, collecting by the week or month. If this phase of the business is extensive, as is the case in truck farming, dairy, poultry, and the like, it would pay the farmer to provide tickets or coupons and sell five or ten dollars' worth in advance even at a small discount. But generally an account with each customer, kept either in a separate book or in part of the Day Book, will be found satisfactory. However, most farmers sell their products for cash, or exchange for merchandise, which is equivalent to cash sales. It is, therefore, unnecessary to enter into an elaborate discussion of keeping such accounts.

Some farmers, very unwisely, attend to the personal business of their hired help, even to the extent of buying their smoking tobacco. There is absolutely no excuse for such a practice. Rather pay your help in installments and let them settle their own bills.

Accounts with persons we owe are generally unnecessary. Most merchants furnish either a pass book in which the account is shown in detail, or an itemized bill is furnished with each purchase. These bills should be pasted or filed in the Bill File and checked off when paid. In the great majority of cases this will prove more satisfactory than ledger accounts.

A special ledger can be provided, or separate pages of the Day Book devoted to special accounts. This classification is made either daily, weekly, or monthly, as time and circumstances allow.

Others Owe Us

Mrs Richard King

1908			Debit	Credit
May	1	Balance	3 80	
	1	1 lb. Butter	20	
	3	2 doz. Eggs	30	
	5	1 Chicken	30	
	12	2 lb. Butter	40	
	18	2 qt. Strawberries	30	
	25	1 qt. Cream	20	
	31	1 lb Butter	20	
	31	Cash		5
			5 70	5
June	1	Balance due	70	

1908

Adams Merchantile Co.

June	4	5 bu. Potatoes	3 75	
	8	60 bunches Onions	2	
	10	2 doz Sweet Corn	2	
		Groceries as per bill, File 17		6 50
	15	8 Crates Strawberries	1 4	
		20 doz. Eggs	3	
		1 Bbl Gb Williams		13
			24 75	19 50
July	1	Balance due	5 25	

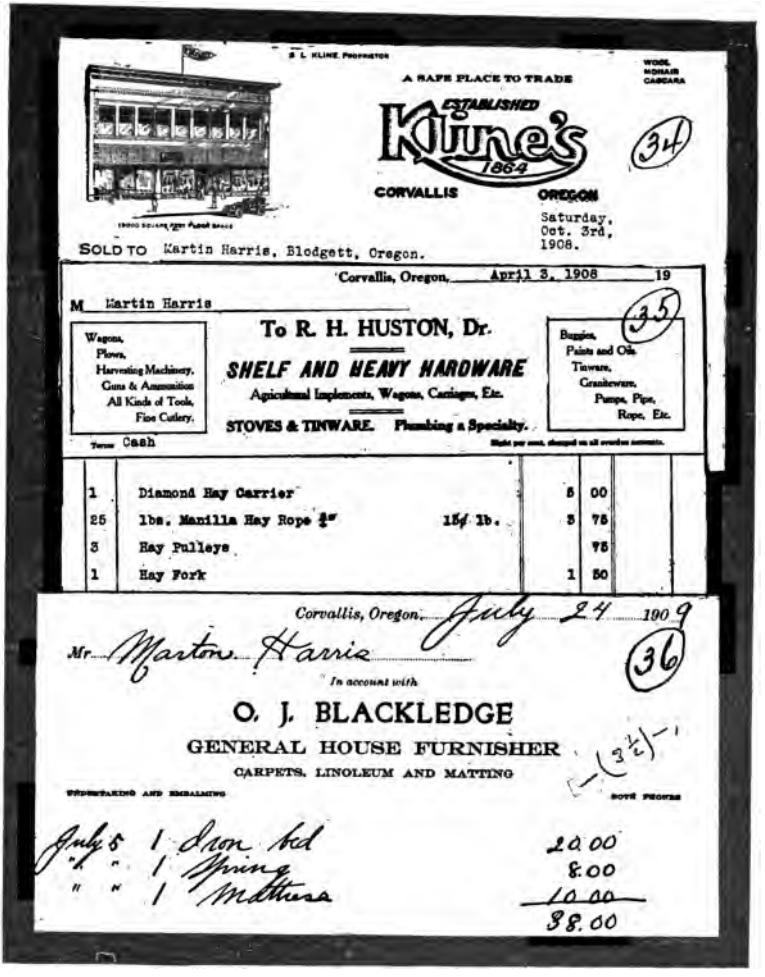
We Owe Others

Frank Johnson

1908			Debit	Credit
April	30	Wages for April		30
May	1	Cash	10	
	5	Order favor C. W. Godden	7 20	
	10	Cash	5	
	20	Cash	3	
	31	Wages for May		30
			25 20	60
June	1	Balance		34 80

David Fagnuf

1908				
July	1	Bought 3-year old horse "Jim" on partial payments of $25.00 per month		150
Aug	1	Cash	25	
Sept	1	"	25	
Oct	1	"	25	
Nov	1	"	25	
			100	150
Dec	1	Balance		50



A SAFE PLACE TO TRADE

ESTABLISHED Kline's 1864

CORVALLIS OREGON

(34)

Saturday, Oct. 3rd, 1908.

SOLD TO Martin Harris, Blodgett, Oregon.

Corvallis, Oregon, April 3, 1908 19

M Martin Harris

(35)

Wagons, Plows, Harvesting Machinery, Guns & Ammunition All Kinds of Tools, Fine Cutlery.

To R. H. HUSTON, Dr.

SHELF AND HEAVY HARDWARE

Agricultural Implements, Wagons, Carriages, Etc.

STOVES & TINWARE. Plumbing a Specialty.

Buggies, Paints and Oils Tinware, Graniteware, Pumps, Pipe, Rope, Etc.

Terms Cash

1	Diamond Hay Carrier		5	00
25	lbs. Manilla Hay Rope ½"	15¢ lb.	3	75
3	Hay Pulleys			75
1	Hay Fork		1	50

Corvallis, Oregon, July 24 1909

Mr. Marion Harris

(36)

In account with

O. J. BLACKLEDGE

GENERAL HOUSE FURNISHER

CARPETS, LINOLEUM AND MATTING

UPHOLSTERING AND REMODELING

(3½)-1

July 5	1	Iron bed	20.00
" 6	1	Spring	8.00
" "	1	Mattress	10.00
			38.00

BILL AND RECEIPT FILE

See also p. 16

Continued Inventory

The illustration on page 17 shows a very convenient form of a continued inventory. The items are written only once in as many years as there are money columns. Besides saving space and labor, it avoids the possibility of omitting important items, if the first list of items is correct. The prices will also be more accurate, since they may be easily compared from year to year. Two or three blank lines should be left under each heading for new items which may appear in the next inventory. The ordinary trial balance book, for sale at any stationery store, is a good form, or additional columns may be ruled in the Day Book or Journal.

Banking

The enormous increase in bank deposits in rural communities is the best evidence that the farmer is beginning to appreciate the value of better system in his finances. It is claimed that fully ninety-five per cent. of the country's business is done by credit currency, such as checks, drafts, money orders, notes, and the like. Many good business men keep only their bank book, and this is far more satisfactory than no bookkeeping at all, especially if bills and receipts are filed for reference. The bank account may be carried entirely independent of all other records.

Banking carries with it many advantages. Important among them are:—

1. The depositor's credit and influence are measured largely by the size and regularity of his bank account.
2. A tendency to economize by a desire to increase the bank balance.
3. The banker becomes your bookkeeper and business counselor.
4. Security against fire and robbers.
5. Indorsed checks are both records and receipts of payments.
6. A benefit to the community by keeping the money in circulation.
7. Convenience in making change.

Martin Harris in account with Citizens' Nat. Bank

Date 1908	No.	Payee	Deposits	Checks	Bal.
Apr. 1		Deposit	98 35		
1	358	Mrs Harris		30	
1		Odell Seed Co.		10	58 35
3	2	Emma Johnson		1 50	
3		Brown & Pickett		3	
		Deposit	70		
5	4	Salem Implement Co		20	103 85
5		E. Skidmore		65	
6		Empire Lumber Co		3 75	
6	7	County Recorder		3	
		Deposit	90		
8	8	Earle & Crockett		80	112 10
9		Farmers' Supply Co.		15 40	
9	360	Frank Johnson		10	
1		Goldie Hardware Co		3 50	
2		Mrs. Harris		30	
		Deposit	40 50		
3		Canton Fertilizer Co.		6 40	
4		O. N. Smith		15 80	
13		Deposit	125		
5		County Treasurer		30 40	
6		Kimball Livery Co		15	
7		Brown & Pickett		2 50	
20	8	C. J. Olson & Son		15	63 60
9		Horning & Baxter		10	
23	370	Crawford Hardware Co.		10 50	
1		Brown & Pickett		13 30	29 80
		Proof:			
		Balance above	29 80		
		Outstanding:			
		No. 361	3 50		
		366	15		
		369	10		
		Balance as per Pass Book	58 30		

BANK ACCOUNT

8. The bank will always loan to a good depositor in preference to one who is not a depositor.

There are only two operations in banking which need discussion here—depositing and checking. The banker will give all necessary directions regarding both, except as to keeping the individual account. This is illustrated on page 26, and will be thoroughly understood after Lesson 5 has been worked out. The special column Cash Book, pages 44 and 45, is an excellent form for keeping the bank account. If all cash is deposited and all payments made by check, the difference between the total columns represents the bank balance. As to deposits, it is preferable to deposit all cash, and then draw out for personal use as needed.

The method of handling checks is as follows: Record the payee, number, and amount, as illustrated under Cash Receipts, page 44. The checks are satisfactory receipts, but the itemized bills should be pasted in the Bill File and bear the same number as the checks. The bank will usually furnish all necessary stationery free of charge. The bank balance is considered a part of the cash on hand, so that no special account except the check stubs and pass book need be kept with the bank. The bank balance is proved each month as follows: Arrange the checks returned numerically. List the checks not returned; add the outstanding checks to the balance shown in the check register; the sum should agree with the balance in the pass book. It is often convenient to keep a special check register. Following is a convenient form, showing the method of proving the balance at the bottom of the page.

A WORD TO THE READER

The real aim of this book is to improve the business methods on the farm which the reader owns now or expects to own in the future. Merely reading the book will, doubtless, create a vague conviction that the subject is important, but it adds but little to the reader's knowledge of accounting and correct business method. This is accomplished only by working out problems typical of the actual experience of the average farmer. In the process of such exercises the conviction will become strong that the business phase is of such importance that no farmer who aspires to success can afford to neglect it. It is suggested that a systematic study of the Illustrative Lessons be taken up in each family, especially where there are boys and girls advanced far enough to profit by the study, and that actual accounts of the home be started wherever it is practicable. For instance, it will be found exceedingly interesting for the boys to take an actual inventory of the homestead after having worked out Lesson 1, and the girls will find Lessons 12 and 13 especially helpful and interesting. It will be found that each lesson will contain suggestions which will prove valuable to every reader, whether he is engaged in farming or in any other occupation.

It is an excellent practice for farmers to come together occasionally to exchange views on any subject pertaining to their common interests. Why not organize a Farmers' Commercial Club and enjoy good fellowship as well as the benefit of each other's experience? One important number of the permanent program could be a discussion of business methods. A leader should be appointed to conduct a regular class for several weeks. An outline for such a course is found on page 161. The publishers will be glad to furnish the necessary material for working out the exercises or for practical use on the farm.

Illustrative Lessons

LESSON 1

THE INVENTORY

I. *General Instructions.*

In preparing these lessons, the student should use great care as to neatness and form. It is not necessary to use the printed forms provided for the purpose, but better work will be done with good stationery. All the work should be done with ink, if practicable. Do not pass by anything that is not clearly understood. Ask questions. The amounts given are totals in all the lessons, unless the word "at" precedes the price. Hand in each lesson when completed for approval.

II. *Written Work.*

1. Use three-column Journal paper found in your account book. This lesson is illustrated on page 18.

2. Write at the top of page 1 of your Day Book: Monday, April 1, 1908. Then copy the following opening statement. All work must be done neatly in ink.

Opening Statement

Six years ago to-day I purchased my present farm, investing cash, $6,000. Below is an accurate inventory of all my property, and a statement of my affairs as they stand to-day.

3. Skip one line, then arrange the following statement of Resources and Liabilities exactly as illustrated on page 18.

Inventory, April 1, 1908

Resources: Farm, 160 A., market value, $8,000. Produce: 200 bu. Corn @ 50c.; 150 bu. Oats @ 45c.; 200 bu. Wheat @ 85c.; 20 tons Hay @ $6.00; Potatoes and Vegetables, $50.00. Stock: 6 Horses, average $100.00; 20 Cows, average $40.00; 11 Steers, average $12.00; 5 Heifers, average $11.00; 12 Hogs, average $6.00; 100 Sheep, average $3.00. Poultry: 150 Chickens @ 45c.; 21 Turkeys @ 75c. Implements: 1 Binder, $125.00; 2 Plows @ $10.00; 2 Harrows @ $12.50; 1 Mower, $40.00; 1 Hay Rake, $15.00; 1 Grain Drill, $50.00; 2 Wagons, together, $110.00; 2 Sets Harness, together, $90.00; 1 Buggy, $100.00; Tools, $50.00. Supplies, $25.00. Household Goods,

$350.00. Life Insurance (paid-up value), $964.36. Cash, $170.00.

Liabilities: Labor (unpaid), $75.00. Accounts Payable, $125.15. Mortgage, favor Iowa Trust Co., $3,000.00.

Your work, if correct, will be exactly as shown on page 18, except that you will fill in the omitted part of the illustration.

LESSON 2

DAY BOOK AND CASH BOOK

I. *General Instructions.*

Use three-column Journal paper. This lesson is illustrated on page 19. The Day Book should contain a complete history of the business. Here the cash account is carried in the two money columns. It is often convenient to carry this account on special pages.

II. *Written Work.*

Copy the following entries in the Day Book on the next page after the last statement. Head the pages and columns the same as in the illustration. Apr. 1, Cash on hand, $170.00.

(1) Heavy rain storm. Shod "Cap" and "Maud" at Scowscroft's; paid $3.00. Bought 2 tons of Coal @ $4.00 per ton.

(2) [Skip a line between each date.] Attended Breeders' Convention at Portland. Program and report on file. Paid expenses, $8.40.

(3) Paid Grocery bill at Murdock's, $11.40.

(4) Bought Milch Cow of J. C. Smith; paid cash, $40.00. Attended concert of the Boston Jubilee Singers, with family; paid expenses, $2.00.

(5) Sold one Calf to P. A. Anderson for cash, $7.00. Bought 1 pr. Gloves, $1.50.

(6) Bought at La Fount's for cash: 1 Ax, $1.00; 1 Hammer, 45c.; Nails, 50c. Went to Portland to select farm implements; expense, $3.00.

(7) Attended church with family. Dr. E. Hamilton preached on "Civic Honor." Collection, 25c.

(9) Bought Shoes for Teddie, $2.00.
(10) Bought 5 bu. Tested Seed Corn @ $2.00 per bu.
(11) Rain all day. Fannie dropped calf.
(12) Sold 3-year-old Horse, "Cap," for $125.00.
(13) Bought one Studebaker Top Buggy; price, $135.00; discount, $15.00; net amount paid, $120.00.
(14) Attended church with family. Our pastor preached on the "Prodigal Son." Collection, 25c. Paid quarterly dues, $10.00.
(15) Mother took sick suddenly. Dr. Brown considers her case very serious.
(16) Hired Frank Johnson for six months @ $30.00 per month and board. Mother is better.
(17 to 28) [Student will insert at least one imaginary entry for each date. Try to use good judgment as to what *might* happen and what might be purchased and sold during the remainder of the month. Be careful not to pay more money than you have received.]
(29) Paid the following bills: Skinner Bros., Dry Goods, $14.50; Murdock's, Groceries, as per bill on file, $15.60. Sold Murdock's 20 doz. Eggs @ 20c.; 12 Dressed Spring Chickens @ 30c.
(30) Received Cream check. See Statement on file, $45.30. You will now balance the cash. Add the two columns; find the difference and enter it on a new page, as shown on page 19.

LESSON 3

PERSONAL ACCOUNTS

I. *General Instructions.*

Use three-column Journal paper. This lesson is illustrated on pages 22 and 23. Read carefully page 21.

II. *Written Work.*

Prepare two sets of accounts, one entitled "Others Owe Us" and the other "We Owe Others."

(*a*) *"Others Owe Us."*

1. Mrs. Richard King, a neighbor, has been buying dairy and poultry products on account. Her ac-

count is illustrated on page 22. Prepare her account with the following entries:—

May 1. There was a balance due from April, $3.80; 1 lb. Butter, 20c.
May 3. 2 doz. Eggs @ 15c.
May 5. 1 Chicken, 30c.
May 12. 2 lbs. Butter @ 20c.
May 18. 2 qts. Strawberries @ 15c.
May 25. 1 qt. Cream, 20c.
May 31. 1 lb. Butter, 20c.; paid cash, $5.00. [Balance the account as illustrated.]

2. In a similar manner prepare an account with the Adams Mercantile Co., with whom we are trading and who are buying produce from us. The entries are as follows:—

June 4. 5 bu. Potatoes @ 75c.
June 8. 60 bunches Onions @ 40c. per doz.; 10 doz. Sweet Corn @ 20c. On the same date we bought goods as per their bill on file, $6.50.
June 15. 8 crates of Strawberries @ $1.75; 20 doz. Eggs @ 15c. On the same date we bought a Suit for William for $13.00. [Prepare this account; rule and balance the same as Mrs. King's account. The balance due is $5.25.]

3. In a similar manner prepare three additional original accounts of not less than ten entries to each.

(*b*) *"We Owe Others."*

1. Frank Johnson, one of the farm hands, has requested that his wages be left on account, and that he be allowed to draw as he needs from time to time. The following items enter into his account. [Prepare it exactly the same as the five preceding accounts.]

April 30. Wages for April, $30.00.
May 1. Cash, $10.00.
May 5. Bought Clothing for him at Goddard's, $7.20.
May 10. Cash, $5.00.
May 20. Cash, $3.00.

May 31. Credit Wages for May, $30.00. [Rule and balance as heretofore.]

2. July 1. Bought a 3-year-old Horse, "Jim," for $150.00, on condition that it was to be paid for at the rate of $25.00 per month. Four payments have been made on the first of each month, beginning August 1st. [Write up the account. Rule and balance as heretofore.]

LESSON 4

STATEMENT No. 2

I. *General Instructions.*

We have now arrived at the end of the year and we are ready to prepare the second financial statement. Use three-column Journal paper. This lesson is illustrated on page 20. Read carefully pages 15 and 16.

II. *Written Work.*

Step 1. Take inventories of all your property, listing and placing a fair valuation on it, same as in Lesson 1.

Step 2. Go through your personal accounts, balance them as illustrated in Lesson 3, and extend the amounts under the various headings in the inventory—Grain, Stock, etc.

Step 3. If you own any notes, stock, or other valuables, list them under Bills Receivable. Be sure not to omit anything you own or owe.

The above directions merely indicate how an inventory is taken. The following inventories are assumed and you will prepare a statement exactly as heretofore. Compare the values and find totals. See page 20.

Inventory, April 1, 1909

Resources: Farm, $8,620.00. Produce: 150 bu. Corn @ 55c.; 175 bu. Oats @ 43c.; 253 bu. Wheat @ 87c.; 20 tons Hay @ $6.50; Potatoes and Vegetables, $40.00. Stock: 6 Horses @ $100.00; 1 3-year-old Horse, "Jim," $150.00; 22 Cows @ $42.00; 14 Steers @ $13.00; 4 Heifers @ $11.00; 11 Hogs @ $6.00. Poultry: 165 Chickens @ 45c.; 25 Turkeys @ 75c.; 10 Geese @ 70c. Implements: 1 Binder,

$120.00; 2 Plows @ $9.00; 2 Harrows @ $11.50; 1 Mower, $40.00; 1 Hay Rake, $13.00; 1 Grain Drill, $45.00; 2 Wagons, $40.00 and $60.00; 1 new Wagon, $100.00; 2 Sets Harness, $25.00 and $65.00; 1 Surrey, $130.00; 1 Light Buggy, $50.00; Tools, $50.00. Supplies, $30.00. Household Goods, $350.00; Piano, $300.00. Life Insurance, $1,073.40. Cash and Bank, $126.04.

Liabilities: Labor (unpaid), $85.00. Accounts Payable, $142.32. Mortgage, favor Iowa Trust Co., $3,000.00. Note, favor Western Lumber Co., $200.00. Due on Piano to Smith Bros., $200.00.

Having completed the statement of Resources and Liabilities, you will now determine the profit for the year. Skip one line and write the following statement, inserting the net worth in Statement No. 1 and what you find above.

Statement of Profits and Losses

Net worth now.....$.....
Net worth last year (Statement No. 1).....$.....

Net profit (or loss).....$.....

Your result will agree with the illustration on page 20, if correct. Dividing the gain with last year's net worth, we find that you have made a gain of about nine per cent. on your investment and labor.

LESSON 5

THE BANK ACCOUNT

I. *General Instructions.*

Study the remarks on banking on page 25. You are supposed to have opened an account with the Citizens' National Bank and to have performed the transactions given below. The bank has given you a pass book in which the teller will enter the deposits as they are made, and the checks, when they are returned once a month. You have kept a private account with which you check monthly.

II. *Written Work.*

1. Enter the following on a sheet of Journal paper, as

illustrated on page 26. Extend the balance after Nos. 351, 354, 358, 368, and 371.

Deposits: April 1, $98.35; (3), $70.00; (6), $90.00; (9), $40.50; (13), $125.00. The checks drawn, beginning with No. 350, are as follows: April 1, Mrs. Martin Harris, $30.00; Odell Seed Co., $10.00. (3), Emma Johnson, $1.50; Brown & Pickett, $3.00. (5), Salem Implement Co., $20.00; E. Skidmore, $65.00; Empire Lumber Co., $3.75. (6), County Recorder, $3.00. (8), Earle & Crockett, $80.00; Farmers' Supply Co., $15.40. (9), Frank Johnson, $10.00; Goddard Hardware Co., $3.50; Mrs. Martin Harris, $30.00; Crown Fertilizer Co., $6.40; O. N. Smith, $15.80. (13), County Treasurer, $30.40; Kimball Livery Co., $15.00; Brown & Pickett, $2.50. (20), C. J. Olson & Son, $15.00; Horning & Bacon, $10.00; Crawford Hardware Co., $10.50. (23), Brown & Pickett, $13.30.

2. At the end of the month add the checks and deposits and find the difference. The resulting balance should be $29.80.

3. The bank has returned your pass book with the canceled checks. You have arranged them numerically and find that all are returned except Nos. 361, 366, and 369. In other words, the bank has paid all except these checks. By adding the outstanding checks to your balance you find that the bank balance ought to be $58.30, which you find agrees with the pass book. The canceled checks should be filed numerically and kept for future reference.

Second Method

A system of modified double entry in which the special column Journal, or Cash Book, is the basis. It is the most satisfactory and labor-saving system in a cash business, where personal accounts are few and where accurate results are desired. The personal accounts are to be carried exactly as in the first method, if such accounts are kept at all.

CHAPTER III

MODIFIED DOUBLE ENTRY, THE SPECIAL COLUMN CASH BOOK

Not many generations ago it was considered sufficient for the average manufacturer merely to record his cash receipts and expenditures and to keep a tolerably accurate check on the cash balance. In many instances the left trousers pocket served as the debit side and the right as the credit side of the "Ledger." Modern business methods and sharp competition have changed these notions until to-day it is necessary to know the cost of production in advance to the smallest detail. Ancient business methods prevail yet, very generally, on the farm. The wonderful progress of the American farmer is due to marvelous natural resources, labor-saving inventions, and natural ingenuity, rather than to wise and prudent management.

Necessity of Careful Accounting

In certain respects, a farmer must combine the methods of the manufacturer and the merchant. He must learn, not only how to increase production, but also how to facilitate the profitable exchange of his products. He must reduce the cost of production to the minimum by increasing the quality and the quantity of his products, and by getting full value out of labor. He must manage so that his working force, farm hands, children, horses, all, are constantly employed. This requires most skillful management in the rotation of crops, in the division of labor, in selecting seeds, fertilizers, and stock; and, above all, it requires general prudence in purchasing equipment and supplies, and in marketing products. Progressive farmers require a variety of records to assist in the proper management of their business. A first-class set of books is just as indispensable to them as to the banker or to the manufacturer.

Superiority of Double Entry

A careful comparison of the results obtained in the last chapter with the balance sheet given on page 47 will convince

the reader of the superiority of double entry. It will be observed that the only result obtained by a comparison of inventories was the net profit or loss. The source or causes of these results cannot be obtained by this method. The method suggested in Chapter II has this advantage: There is not a farmer so busy or so ignorant that he cannot adopt it and derive great benefit from its use. But the ambitious, progressive farmer will not be satisfied with this primitive method any more than a wide-awake merchant will be satisfied with single entry bookkeeping. He will adopt a system which will give him at any time reliable information as to his financial standing, cost of production of crops, live stock and poultry, household expenses, etc., and by which he can prove that his work is correct.

Single and Double Entry Compared

The distinction between single and double entry is unimportant for our present purpose, but it may be a satisfaction to the student to know that the method we are now to consider is double entry. The important distinction between the two methods is that in double entry accounts are kept with persons, property, and allowances, while in single entry accounts are kept with persons only. In double entry there is a corresponding debit for every credit; the total debits and credits must therefore be equal, and must balance at any time. This becomes clear by referring to the Cash Book, page 44. In the first entry, the amount is entered in both the Total and in the Sundries column; and the same is true of all the succeeding entries. Hence the sum of columns four to ten inclusive must equal the total in column three. You will find the same to be true of the Payments, and of the Household Accounts.

Additional Books Needed

Very important books in double as well as in single entry are the Day Book and the Bill File. They are to be kept in exactly the same way as suggested under single entry, except that no cash entries are recorded in the Day Book. It is used only as a diary. The important consideration now is to adopt additional records that will furnish the necessary informa-

tion in systematic and tabular form requiring the minimum amount of labor.

The Cash Book

The *Cash Book* is the basis of classification. A very convenient form is given on pages 44 and 45. The special columns take the place of a Ledger. All money columns except the total column will be referred to as distribution columns. They are in reality separate accounts, and this form might, therefore, properly be called a combined Ledger and Cash Book. The form suggested has the important advantage of being self-balancing. A trial balance can be taken at the end of each page, month, or year, as illustrated on page 57. The process of preparing a financial statement becomes extremely simple by this method. A few observations regarding equipment and supplies, improvement and repairs, will be of assistance in using the distribution columns.

Equipment and Supplies

In accurate accounting, the question often arises: What shall be considered equipment, and what supplies? Supplies are defined as expendable or consumable materials, which are incapable of being used more than once; while equipment is of more permanent character, articles which can be used repeatedly. Fuel, lubricating oil, cotton waste, feed, etc., are supplies; while machinery, furniture, and apparatus of all kinds are equipment.

Improvements and Repairs

The distinction between improvements and repairs is not always clearly understood. An improvement adds value to the property, in the shape of equipment, buildings, drains, fences, and the like, while repairs merely keep up the property. A coat of paint on an unpainted building is an improvement; repainting is classed under repairs. This distinction is very important in making an inventory. Improvements are added to the inventory, repairs are not.

Cash Balance and Sundry Columns

The cash balance is found as follows:—

Total receipts	$653.14
Total payments	578.80
Balance	$74.34

Note that the totals of the distribution columns equal the total of column on both sides of the Cash Book. The Sundries column contains all entries which do not fall under the special columns. At the end of the year the items are segregated under various titles. The segregation for the month of April is as follows:—

Sundry Receipts Column

Balance	$126.04
Labor	10.00
Wood	22.40
Total	$158.44

Sundry Payments Column

Interest	$22.00
Taxes	33.40
Accounts Payable	15.80
Insurance	35.10
Total	$106.30

Improvements and Repairs Column

Improvements	$80.00
Repairs	34.60
Total	$114.60

Trial Balance

In the language of the accountant, a trial balance is a test of the equality of the debits and credits in a set of double entry books. Our trial balance is much simpler; it is simply a test of equality of the total columns and the distribution columns. In the Cash Book, merely add the distribution columns on each side and note that their sum equals the respective total col-

umns. The Household accounts are balanced in the same manner.

The Ledger

With a special column Cash Book, the Ledger can be dispensed with in most cases. The further classification of the Sundry columns can be done at the end of the year, as illustrated on page 46, and a few pages of the Day Book can be devoted to "What We Owe Others" and "What Others Owe Us." Where a special Ledger is found necessary, the form shown on pages 77 or 82 can be used.

The old-style Ledger possesses some advantages over any other form. The debit appears on the left and the credit on the right side on the same page. It is used either in double or single entry. The difficulty of keeping the Ledger in balance prevents the use of the double entry Ledger to a very large extent. This is especially true if an attempt is made to use the ordinary Journal.

Direct entries into either the double or single entry Ledger present less difficulties, and the method is recommended where the classification of accounts is such as to make the combined Cash Book and Ledger unpractical. This need scarcely ever be the case, however, because if ruled sheets cannot be obtained without headings, a blank sheet may be ruled with any number of columns and headed with titles to suit. For example, an orchardist would head his Receipt columns Apples, Prunes, Peaches, Small Fruits, etc.; while an exclusive stock farmer would devote special columns to the different kinds of stock.

The advantage of the Ledger method is that each account is more condensed, while the self-proving and labor-saving features are important in the special column Cash Book. Preparing a trial balance and balance sheet, and closing the Ledger properly, though very simple for the experienced accountant, requires a proficiency in bookkeeping that few farmers possess.

On page 77 is an illustration of the ordinary form of direct entry Ledger, showing the entries for April 1st. Compare these with the first entries on pages 44 and 45, and note the similarity of results. In the form follow the arrows and note

that there is a debit for every credit, and vice versa. In the column marked (*a*) is entered the Day Book page, if the entries have been previously made in that book.

The Annual Statement

The annual statement exhibits in a condensed form the financial operations for a given period. It shows the resources and liabilities, the cash receipts and expenditures, the profits and losses, the net profit or loss, and the net worth. It enables the proprietor to analyze his business with considerable accuracy and to trace the sources of profits and losses. There are various forms of statements, but the illustration on page 47 seems best suited to the farming business. Statement No. 3 shows the results of a month's business only. The inventories are obtained from separate schedules and the cash receipts and expenditures are the totals found in the Cash Book. The profit and loss accounts are fully analyzed after Statement No. 4.

Illustrative Lessons

LESSON 6

CASH RECEIPTS, SET 1

I. *General Instructions.*

Use Forms 2 and 3. This exercise is illustrated on page 44. The result of your work will be exactly as illustrated on that page, if correct. Do not merely copy page 44, but compare your work with the illustration after you have done your best. Before beginning your written work read very carefully pages 37 to 42. This should convince you that double entry is far superior to single entry.

II. *Written Work.*

1. Turn to Form 2 in your Cash Book and enter the following items in the proper columns:—

April 1, Balance forwarded, $126.04 (Total and Sundry columns); 2 tons Clover @ $6.00; 80 bu. Corn @ 65c.

(3) 12 Cabbages @ 10c.; 25 lbs. Butter @ 25c.

(6) 2 Steers @ $40.00; 20 Spring Chickens @ 45c.; Hauling Coal, 1 day, $5.00.

(9) Jersey Calf, $10.00; 2 cords Wood @ $4.00; 5 bu. Potatoes @ $1.00.

(12) Heifer, $25.00; 10 lbs. Butter @ 28½c.

(13) 75 bu. Corn @ 65c.; Work on County Road, $5.00; 4 bu. Apples @ $1.50.

(15) 20½ doz. Eggs @ 20c.; 36 lbs. Butter @ 25c.; 2 tons Clover @ $6.00.

(17) 100 Apple Trees @ 20c.; 1 Steer, $37.00; 12 Cedar Posts @ 20c.

(19) 6 Spring Chickens @ 40c.; 95 bu. Corn @ 60c.; 3 tons Hay @ $6.00.

(20) Jersey Calf, $10.00; 50 bu. Oats @ 35c.

(23) 1 Turkey, $1.40; 1 bu. Clover Seed, $1.50.

(26) 18 lbs. Cheese @ 15c.

(29) 3 cords Wood @ $4.00; 10 bu. Barley @ 40c.; 4 tons Timothy @ $5.50.

RECEIPTS April 1908

DATE	ITEMS		TOTAL	GRAIN	HAY	ORCHARD, GARDEN	STOCK	DAIRY	POULTRY	SUNDRIES
1	Balance	FORWARDED	126 04							126 04
	2 Tons Clover		12		12					
	80 bu. Corn	.65	52	52						
3	1 doz. Cabbage		1 20			1 20				
	25 lb. Butter	.25	6 25					6 25		
6	2 Steers		80				80			
	20 Spring Chickens	.45	9						9	
	Hauling Coal 1 day		5							5
9	Jersey Calf		10				10			
	2 Cords Wood		8							8
	5 bu. Potatoes		5			6				
12	1 Heifer		25				25			
	10 lb. Butter	.28½	2 85					2 85		
18	75 bu. Corn	.65	48 75	48 75						
	Work on County Road		5							5
	4 bu. Apples		6			6				
15	20 doz. Eggs	.20	4 10						4 10	
	36 lb. Butter	.25	9					9		
	2 Tons Clover		12		12					
17	100 Apple Trees		20			20 -				
	1 Steer		37				37			
	12 Cedar Posts		2 40							2 40
19	6 Spring Chickens		2 40						2 40	
	95 bu. Corn	.60	57	57						
	3 Tons Hay		18		18					
20	Jersey Calf		10				10			
	50 bu. Oats	.35	17 50	17 50						
23	1 Turkey		1 40						1 40	
	1 bu. Clover Seed		1 50		1 50					
26	18 lb. Cheese	.15	2 70					2 70		
29	3 Cords Wood		12							12
	10 bu. Barley		4	4						
	4 Tons Timothy	5.50	22		22					
30	Produce for Household		18 05			5 25		6 50	6 30	
		FORWARDED	653 14	179 25	65 50	37 45	162	27 30	23 20	158 44

GENERAL FARM

PAYMENTS

DATE	ITEMS	CK NO.	TOTAL	HOUSEHOLD PERSONAL	SEEDS, FERTILIZERS	WAGES LABOR	SEWG. EXP. MARKETING	STOCK FEED	IMPLEMENTS	IMPROVE REPAIRS	SUNDRIES
	FORWARDED										
1	Household Expenses	42	30	30							
	12 Bu. Seed Wheat	43	10		10						
3	Labor 50 ct., Sheering 3 ct.		4 50			1 50	3				
5	Interest, M. P. Co.	44	20								20
	Jersey Cow	45	65					65			
	Lath & Shingles	46	3 75							3 75	
6	Garden Seeds		1 60		1 60						
	Road Tax	47	3								3
8	Addition to Barn	48	80							80	
	Crates & Bags	49	15 40				15 40				
9	Wages to Johnson	50	10			10					
	Steel Frame Grind Stone	51	3 50						3 50		
12	200 ft. Lumber, $10 per M.		2 00							2 00	
	1 Shovel		1 25						1 25		
13	Household Expenses	52	30	30							
	John Smith, 2 days		2 50			2 50					
	Staples		35							35	
14	Taxes	53	30 40								30 40
15	Personal Ex		3 50	3 50							
	1 Rip Saw		2 50						2 50		
	16th to 22nd omitted										
23	Trees & Shrubs	60	25 80		25 80						
	Alfalfa Seed		3 20		3 20						
	2 Doz Leghorn Eggs	61	5 80					5 80			
25	Interest on Binder Note	62	2								2
	1 Angora Goat	63	10					10			
	Private Incidental Ex		5	5							
	6 Gopher Traps		1 50						1 50		
26	Repairs on Horse Stalls	64	13 50							13 50	
	Keystone Deherner	65	10 50						10 50		
29	2 Geese		3					3			
	Wages to Johnson	66	10			10					
	Apple Boxes		3 75				3 75				
30	Butter Wrappers		1 75				1 75				
	Life Ins. Premium	67	35 10								35 10
	Produce for Household		18 05	18 05							
	FORWARDED		578 80	116 55	62 00	36 50	30 90	90 90	21 05	114 60	106 30

CASH BOOK

(30) Produce for Household Use, Orchard, and Garden, $5.25; Dairy, $6.50; Poultry, $6.30.

2. Add the columns. The correct results are as follows: Total, $653.14; Grain, $179.25; Hay, $65.50; Orchard and Garden, $37.45; Stock, $162.00; Dairy, $27.30; Poultry, $23.20; Sundries, $158.44.

Note that the total of the distribution columns equals the total column.

3. The Sundry column contains the following items:—

Balance, April 1st	$126.04
Labor	10.00
Wood	22.40
Total	$158.44

Verify Step 3 by setting down each item under its appropriate head and adding. Arrange your work as shown above.

LESSON 7

CASH PAYMENTS, SET 1

I. *General Instructions.*

See Lesson 6. You will fill in the items between the 15th and 23d, omitted in the illustration. If payments are made by check and the bills filed for reference, the items need not be entered in the Cash Book. The payee, the amount of the check, and the distribution are sufficient entries.

II. *Written Work.*

1. Enter the following expenditures for April on Form 3. (See page 45.)

April 1, on Household Expenses, $30.00 (Total and Household columns); 12 bu. Seed Wheat @ 83⅓c.

(3) Labor in Garden, $1.50; shod "Cap" and "Maud," $3.00.

(5) Interest M. P. Co., $20.00; Jersey Cow, $65.00; Laths and Shingles, $3.75.

Financial Statement. Year Ending Mar. 31, 1908

Cash Receipts and Payments

Receipts.		Payments.	
Balance forwarded	$ 126 04	Household & Personal	$ 115 28 0
Grain	171 43	Trees, Seeds and Fertilisers	1 29 71
Hay	294 20	Labor	435 70
Orchard and Garden	335 10	General Expense	289 39
Stock	1300 00	Stock	445 20
Dairy Products	1018 12	Machines and Implements	225 76
Poultry	262 39	Farm (improvements)	350 00
Sundries	60 81	Repairs	174 40
Machine and Implements	755 15	Sundries:—	
Hired Labor		Life Insurance	154 30
		Personal Expense	
		Accounts Payable	258 32
		Interest	230 00
		Taxes	35 60
		Gifts	94 60
		Insurance	29 50
		Balance on hand	276 96
Total	$ 4174 24	Total	$ 4174 24

Segregation of Sundry Columns

$679.32

Resources and Liabilities.

Resources.		Liabilities.	
Farm (market value)	$ 9070 00	Hired Labor	$ 35 00
Cash and Bank	271 96	Bills Payable	3200 00
Life Insurance (Paid up value)	1154 80	Accounts Payable	90 00
Stock*	1948 50	Gifts	40 00
Grain*	350 00		
Hay*	168 75		
Orchard and Garden*	45 00		
Dairy Products*			
Poultry*	100 55		
Machines and Implements*	953 40		
Household Goods	682 40		
General Supplies	37 80		
		Net Worth	11429 76
Total	$ 4794 76	Total	$ 4794 76

* As per Inventory

Statement of Profit and Loss.

Net Worth (as above)	$ 11429 76
Net Worth last year	10334 98
Gain for the year	1094 78
Less 6% Int. on Investment	375 93
Net Earnings	718 85

ANNUAL STATEMENT

Accounts Showing Profit or Loss, Year Ending Mar. 31 1908

(Amounts are taken from Inventories, Cash Book, and Special Records.)

GRAIN

Cost.		Returns.	
Inventory last year	$ 377 86	Present Inventory	$ 380 00
Labor	440 00	Receipts from Sales	712 43
Interest on Value of Land	184 80	Fed to Stock	770 07
Sec. of Fertilizer	129 71	Fed to Poultry	150 00
Net Profit	780 13		
Total	$ 1912 50	Total	$ 1912 50

STOCK

Cost		Returns.	
Inventory last year	$ 1966 00	Present Inventory	$ 1948 50
Labor	385 00	Receipts from Sales	1300 00
Grain	770 07	Receipts from Dairy	1018 12
Hay	149 80	Labor (Cash Receipts	155 13
Interest on Inventory last year	117 96		
Pasturage on Land	135 00		
Cash outlay	445 20		
Net Profit	552 74		
Total	$ 4521 77	Total	$ 4521 77

ORCHARD AND GARDEN

Cost.		Returns.	
Inventory last year	$	Present Inventory	$
Labor and Marketing		Receipts	
Interest on Land			
Net Profit			
Total	$	Total	$

HAY

Cost.		Returns.	
Inventory last year	$ 130 00	Present Inventory	$ 168 75
Labor	30 00	Receipts	204 20
Interest on Land	63 00	Fed to Stock	149 80
Net Profit	299 75		
Total	$ 522 75	Total	$ 522 75

(Account)

Cost.		Returns.	
	$		$
Total	$	Total	$

ANNUAL STATEMENT

(6) Garden Seed, $1.60; Road Tax, $3.00.
(8) Addition to Barn (contract), $80.00; Crates and Bags, $15.40.
(9) Wages to Johnson, $10.00; Steel Frame Grindstone, $3.50.
(12) 200 ft. Lumber @ $10.00 per M.; 1 Shovel, $1.25.
(13) On Household Expenses, $30.00; John Smith, labor, $2.50; Staples, 35c.
(14) Taxes, $30.40.
(15) Cash for personal use, $3.50; Rip Saw, $2.50; paid O. N. Smith in full, $15.80.
(17) Pruning Orchard, $2.50; Chicken Feed, $5.00.
(19) Manure from Kimball Livery, $15.00; Horse Shoeing, $2.50; Trip to Ames, $4.50; Patent Fertilizer, $6.40.
(20) Leghorn Pullet, $2.10; Plastering and Paper Hanging, $15.00; 2 Halters @ 90c.; Wages to Johnson, $10.00.
(23) On Household Expenses, $30.00; Trees and Shrubs, I. N. C., $25.80; Alfalfa Seed, $3.20; 2 doz. Leghorn Eggs, $5.80.
(25) Interest on Binder note, $2.00; Angora Goat, $10.00; Private Expenses, $5.00; ½ doz. Gopher Traps, $1.50.
(26) Repairs on Horse Stalls, $13.50; 1 Keystone Dehorner, $10.50.
(29) 2 Geese, $3.00; Wages to Johnson, $10.00; Apple Boxes, $3.75.
(30) Butter Wrappers, $1.75; Life Insurance Premium, $35.10; Produce for Household, $18.05.

2. Add the columns. The correct results are as follows: Total, $578.80; Household and Personal, $116.55; Seeds and Fertilizers, $62.00; Hired Labor, $36.50; General Expenses and Marketing, $30.90; Stock and Feed, $90.90; Machinery, Implements, and Tools, $21.05; Repairs, $114.60; Sundries, $106.30. Your distribution columns may not agree with the totals given, but note that the total of the distribution columns equals the total column.

3. By going through the Sundry column we find that it contains the following:—

Interest	$22.00
Taxes	33.40
Accounts Payable	15.80
Insurance	35.10
Total	$106.30

4. Classify the Improvements and Repairs column. (See definition of improvements and repairs, page 39.) The correct result is as follows:—

Improvements	$80.00
Repairs	34.60
Total	$114.60

5. Balance the cash by taking the difference between the total receipts and the total expenditures. The correct difference is $74.34.

LESSON 8

FINANCIAL STATEMENT No. 3

I. *General Instructions.*

Under ordinary circumstances a financial statement should be made out only once a year, but for additional practice you may prepare a statement covering the first month. As will be observed on page 47, this is a condensed statement of cash Receipts and Expenditures as they appear in the different columns of the Cash Book; a statement of Resources and Liabilities; and, finally, a statement of Profits and Losses. Your Balance Sheet will be exactly like the illustration except as to amounts. The new inventories are as follows: Farm, $8,700.00; Cash and Bank, $74.34; Stock and Feed, $2,145.00; Grain, $105.00; Hay, $55.00; Orchard and Garden, $35.20; Dairy Products, $26.30; Poultry, $122.80; Machinery, Implements, and Tools, $870.05; Household Accounts, $650.00; Life Insurance, $1,136.80; General Supplies, $25.00; Hired Labor, $85.00; Bills Payable, $3,200.00; Accounts Payable, $326.52.

II. *Written Work.*

1. On a statement blank (Form 12) enter the cash Receipts and Payments under the respective titles. The Sundry columns were segregated in Lessons 6 and 7.

2. Enter the Resources and Liabilities and check with the illustration. Then find the Net Worth and Profit or Loss. In this case there is a loss of $1.01, due to the fact that April is naturally an unproductive month for the farmer.

3. The detailed statement of the profits or losses on Grain, Stock, etc. (Form 13), will not be taken up until at the end of the year (Lesson 11).

LESSON 9

CASH RECEIPTS, SET 2

I. *General Instructions.*

The next set is similar in principle to Set 1, and is given for additional practice. The same forms are used. For the purpose of completing a year's work in the next balance sheet, we assume the amounts to be forwarded for eleven months, March being the last month of our fiscal year.

II. *Written Work.*

Enter as in Lesson 6.

March 1. Forwarded: Total Receipts (to be entered horizontally under the proper headings on Form 2), $3,644.34; Grain, $591.93; Hay, $134.95; Orchard and Garden, $277.95; Stock, $1,110.50; Dairy, $997.07; Poultry, $246.14; Sundries, $285.80.

(1) 2 Pigs @ $6.25.

(3) 20 bu. Apples @ 65c.; 50 bu. Potatoes @ 45.

(7) 3 tons Clover @ $6.50; 1 Veal Calf, $9.00; 40 bu. Oats @ 45c.

(9) 25 lbs. Dressed Chicken @ 20c.

(10) 10 doz. Eggs @ 15c.; 1 Cow, $45.00.

(12) 1 ton Clover, $6.50; sold old Wagon, $10.00.

(15) Hired out Team and Buggy, $4.00; Labor on County Road, $5.00.

(16) 50 bu. Corn @ 60c.; 95 boxes Strawberries @ 15c.; 10 lbs. Butter @ 25c.

(19) 3 tons Timothy @ $5.75; 3 days' Labor for Johnson & Co. @ $1.60; 14 doz. Eggs @ 15c.

(21) 2-year-old Colt, $75.00; Strawberry Plants, $4.60; 18 lbs. Butter @ 25c.; 4 qts. Cream @ 15c.; 4 Calves @ $12.00.

(24) 50 bu. Oats @ 40c.; 10 Dressed Chickens @ 30c.

(28) 50 bu. Corn @ 65c.; 3 tons Timothy @ $5.00; sold 1 set Harness, $32.40; 2 tons Clover @ $5.50.

(30) 50 bu. Barley @ 40c.

(31) Produce used for Household, $13.90 (Orchard and Garden, $2.80; Dairy, $6.45; Poultry, $4.65).

(31) From Phœnix Hotel, $7.00 for Cream.

Add all the columns and prove. The correct total is $4,174.24.

The Sundry column is segregated as follows:—

Cash Balance forwarded	$126.04
Implements, sales	60.81
Labor for others	155.15
Total	$342.00

LESSON 10

CASH PAYMENTS, SET 2

I. *General Instructions.*

In principle same as Lesson 7.

II. *Written Work.*

Enter as in Lesson 7.

March 1. Forwarded: Total, $3,513.63; Household and Personal, $1,028.90; Trees, $99.66; Hired Labor, $386.00; General Expenses and Marketing, $269.49; Feed and Stock, $427.85; Machinery and Tools, $172.31; Improvements and Repairs, $513.20; Sundries, $616.22.

(1) On Household Expenses, $30.00.

(3) 200 ft. Lumber @ $10.00 per M.; 20 Posts, $1.60; 1 Shovel, $1.25.

(7) Strawberry Crates, $4.00; Assessment Farmers' Telephone Co., $2.00; shod "Prince," $1.50; 1½ bu. Timothy Seed @ $1.10.

(9) 10 bu. Rye Seed @ 60c.; 1 Cultivator, $25.00.

(10) Setting Tire on Wagon, $3.00; half month's Wages to Frank, $15.00.

(12) Advertising Garden Products, $1.20; Membership in Breeders' Association, $3.00; Incubator, $20.00.

(14) On Household Expenses, $30.00; Insurance, 3 years, $29.50.

(15) 1 set Plymouth Eggs, 50c.

(16) 2 sets Leghorn Eggs @ 50c.; Dehorning Cattle, $3.25; 100 lbs. Wire @ 3c.

(17) Labor on Ditch No. 1, $16.50; Labels for Apple Boxes, $4.20; Garden Seeds, $3.40.

(19) Carpentry Tools, $2.50; Harness Oil, $1.00; Bran and Shorts, $5.60; Subscription to Y. M. C. A., $5.00.

(21) 10 lbs. Nails @ 6c.; Blacksmithing as per bill, $3.00; 40 Apple Trees @ 20c.; 10 Peach Trees @ 25c.; paid Frank on Wages, $5.00; 5 sacks Phosphate @ $1.70.

(24) On Household Expenses, $30.00; Labor in Orchard, $2.00.

(26) Shovel and Hoe, $1.50; Allowance for James at college, $20.00.

(28) 1 Plowshare, $3.20.

(29) Balance Wages to Frank, $10.00; 1 bbl. Salt, $2.50; 2 Pigs @ $2.25; Church Subscription, $5.00; Shingles and Nails, $1.00.

(30) Taxes, $38.60; paid George for keeping books, $5.00 (Personal column).

(31) Produce for Household, $13.90; Labor in Garden, $1.20.

Add all the columns and prove. The correct total is $3,902.28.

If you could go through the entire Sundry column for the year, you would find the following items: Life Insurance, $54.30; Accounts Payable, $252.32; Insurance, $29.50; Inter-

est, $230.00; Taxes, $38.60; Charities, etc., $94.60. The Improvements and Repairs column is segregated as follows: Improvements, $350.00; Repairs, $174.40. The Household and Personal column would be segregated in the same manner.

Arrange the segregation as illustrated on page 50.

LESSON 11

FINANCIAL STATEMENT No. 4

I. *General Instructions.*

Having reached the end of our fiscal year, we are now ready to make a complete analysis of the business. First, we prepare the financial statement on Form 12, the same as in Lesson 8. Then we analyze the accounts showing profit or loss on Form 13.

II. *Written Work.*

Complete Form 12 by inserting the amounts in their order. The inventories are as follows:—

RESOURCES.

Farm	$9,070.00	
Cash and Bank	271.96	
Stock and Feed	1,948.50	
Grain	380.00	
Hay	168.75	
Orchard and Garden	45.00	
Poultry	100.55	
Machinery and Implements	953.00	
Household Goods	682.40	
General Expense and Marketing	37.80	
Life Insurance	1,136.80	
Total Resources		$14,794.76

LIABILITIES.

Hired Labor	$35.00	
Bills Payable	3,200.00	
Accounts Payable	90.00	
Gifts	40.00	
Total Liabilities		3,365.00
The Net Worth is		$ (?)
The Net Profit is		$ (?)

If you deduct from last year's inventory the value of Household Goods, Life Insurance, Cash, and $2,220.00 as the value of the dwelling house, the productive investment is $6,265.64. Deducting 6 per cent. on this investment, the proprietor's earnings are $718.85. To this should be added the amount drawn for personal use.

Accounts Showing Profits or Loss

Consult illustrations, pages 47 and 48.

It is assumed that special labor and feed records (Forms 6 and 9) have been kept during the year, and we are now ready to analyze our leading accounts showing profits or losses. The first of these accounts is Grain. We must debit this account with all the elements that enter into the cost of its production, and credit it with the returns. The first item of cost in last year's inventory (Financial Statement, No. 2; Lesson 4) is $377.86; Labor (Horse and Man, from Labor Record), $440.00; Interest on the value of Land devoted to Grain (56 acres @ $55.00 per acre), 6 per cent., $184.80; Seeds and Fertilizers (Cash Payments), $129.71. The returns are: Present Inventory, $380.00; Cash Receipts, $712.43; Fed to Stock (Feed Record assumed), $770.07; Fed to Poultry, $50.00. From this we obtain the net profit, $780.13.

In a similar manner we consider the Stock account and the Hay account. The illustrations, pages 47 and 48, show the figures supplied from each account. Complete the statement and find the profit or loss of each account.

It should be borne in mind that this exercise in cost accounting is only suggestive. The principles are fundamental and correct, but their application in practice may vary greatly. Thus, some farmers will charge live stock a certain amount for housing, perhaps also for the use of utensils, machinery, and the like; others will insist on deducting the cost and care of the dwelling from the annual farm inventory, since this is not capital invested in the business. For a full discussion of this subject, see Bulletin 73, Bureau of Statistics, U. S. Department of Agriculture. The interpretation and use of the results obtained is a subject far too extensive for this treatise.

CHAPTER IV

HOUSEHOLD ACCOUNTS

It will be seen that no provision has been made in the general Cash Book for separate items in the household accounts. This is left for the housekeeper. The fact that her field is somewhat limited from a business point of view is no argument in favor of loose and careless methods of accounting.

Most housekeepers prefer to receive a fixed allowance for household expenses, whenever it is practicable. For our present purpose we will suppose that the following agreement has been entered into between the farmer and his wife. She is to receive the following:—

Monthly Allowances for Household and Personal Expenses

For proprietor and wife	$25.00
Board for hired help	15.00
For four children	32.00
Sundries	18.00
Total	$90.00

In addition to the cash allowance, vegetables, poultry, and dairy products are furnished from the farm at market price. The proprietor gives his wife an allowance of $90.00 each month either in one or in several payments, and enters it in his cash expenditures. His wife, in turn, enters her allowance in her record. Bills for furniture, clothing, and utensils are pasted or filed in a Bill and Receipt File in the same manner as in the farm accounts.

Note that the items entered in columns one or two are also entered in columns eight, nine, or ten, since they are purchases from the farm. Because they are entered both as receipts and payments, they do not affect the cash balance.

At the end of the year the proprietor enters the totals of columns one and two in his cash receipts under the proper

headings, and at the same time they are entered as cash payments in the Household column. (See page 44, under April 30th.) Thus, the farm will receive full credit for what it sells to the household as well as to others.

It is suggested that the housekeeper open a private bank account and pay large items by check. (See April 13th, 29th, and 30th.) There are numerous advantages in keeping a bank account. (See page 25.) A bill for furniture, utensils, and improvements should always be taken and pasted in the Bill File. It is convenient to number the bills the same as the checks, as suggested in column six. Since indorsement by the payee constitutes receipt, it is generally unnecessary to require a receipt when payment is made by check.

Page 60 shows a convenient form of a combined household Cash Book and Ledger. A summary of the receipts and payments is prepared at the end of the year, as shown on page 62.

Trial Balance

The accuracy of the work is tested at the end of each page or each month as follows:—

Groceries	$13.05
Meat	11.80
Dairy and Poultry	12.40
Clothing	16.85
Furniture and Utensils	22.05
Help and Laundry	11.60
Library	6.65
Light and Fuel	6.10
Gifts	2.35
Personal	1.25
Travel and Recreation	3.00
Incidental	2.65
Physician and Medicine	1.50
Telephone Rental	1.50
Total	$112.75

Observe that this total agrees with the total given on page 61.

Illustrative Lessons

LESSON 12

HOUSEHOLD ACCOUNTS, SET 1

I. *General Instructions.*

See illustration, page 60. The columns are used exactly as in Lesson 6. Use Forms 4 and 5. Note that produce taken from the farm is entered in both the receipts and expenditures, since no cash is paid out. The farm will be credited with the produce at the end of the month or year in the farm accounts.

If payments are made by check, and the bills filed, the items need not be entered in the Cash Book. The payee, the amount of the check, and the distribution are sufficient entries.

II. *Written Work.*

1. Enter the following Household Receipts and Expenditures for the month of April, 1908. (See illustration, page 60.)

April 1. Balance forwarded, $15.40; on Allowance, $30.00; Shoes for Mabel, $3.00; 2 Vests, $1.00; 10 yds. Muslin @ 10c.; 4 yds. Gingham @ 15c.

(3) Sugar, $1.00; Raisins, 25c.; Subscription to Successful Farming, $1.00; Subscription to Ladies' Home Journal, $1.75.

(5) Collection, 25c.; Ladies' Aid Society, 25c.; 2 doz. Eggs, 40c.; Medicine, 50c.; Stove Polish, 10c.

(6) Doctor, $1.00; Ella, 25c.; George, 50c.; Necktie for Jim, 25c.; 5 bu. Potatoes @ 40c.; Skillet, 50c.

(8) 5 Cabbages, 25c.; Bread Knife, 40c.; Meat, 50c.; Parlor Lamp, $3.00.

(9) 3 lbs. Crackers, 25c.; Peanuts, 10c.; Eggs, 50c.; to boys for ball game, 50c.; Starch, 10c.; Relief Society, 50c.

(12) Collection, 35c.

(13) Rocker, $7.00; Prunes, $1.00; on Allowance, $30.00; Coal, $5.00; Vegetables, 40c.

(14) Suit for William, $6.00; Hat for George, 75c.; Concert, $1.00; 2 yds. Ribbon, 40c.; 1 doz. Plates, $2.20; ½ doz. Cups and Saucers, 90c.

(15) Schoolbooks and Stationery, $2.40; Kerosene, 75c.; Ham, $1.35; Sociable, 50c.; Shoe Strings, 10c.

(17) Kitchen Cabinet, $6.50; 2 Chairs, $1.30; Laundry, 97c.; Toilet Soap, 25c.; 3 lbs. Fish, 45c.; Towel Rack, 25c.

(19) Collection, 25c.

(20) 6 yds. Toweling, 60c.; Tacks, 10c.; 1 gal. Vinegar, 30c.; Matches, 25c.; White House Cook Book, $1.50; Carbolic Acid, 10c.

(23) Telegram to M. F. & Co., 50c.; Telephone Rental, $1.50; Mrs. Sloan for Dressmaking, $2.50; Madrid and return, $2.00.

(25) 1 pr. Rubbers, 75c.; Stockings for Ella, 50c.; Flowers for Mrs. Knox's funeral, $1.00; Allowance, $30.00; Laundry, 65c.; Lamp Wicks, 10c.

(26) Collection, 25c.

(29) Meat, City Market, as per bill on file, $9.50; Groceries at Murdock's, as per bill on file, $4.40; Help for the month, $10.00.

(30) Vegetables for the month, $2.60; Poultry, $5.40; Milk, Cream, and Butter, $6.50.

2. Add all the columns. (Use lead pencil until you have proved your work.) If your work is correct, you will find the following totals: Receipts.—Cash, $105.40; Produce, $5.25; Dairy and Poultry, $12.80. Payments.—Groceries, $12.65 (see correction, page 61); Meat, $11.80; Dairy and Poultry, $12.80; Clothing, $16.85; Furniture and Utensils, $22.05; Help and Laundry, $11.60; Library, $6.65; Medicine and Physician, $1.50; Light and Fuel, $6.10; Gifts, $2.35; Personal, $1.25; Traveling and Recreation, $3.00; Incidental, $4.15.

LESSON 13

HOUSEHOLD ACCOUNTS, SET 2

I. *General Instructions.*

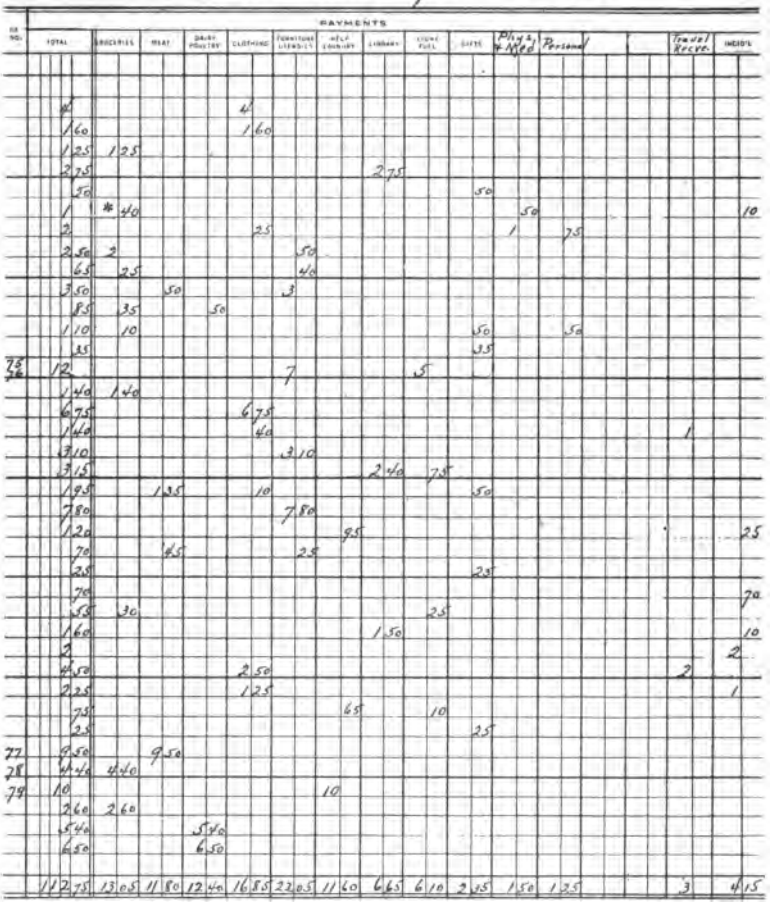
Use Forms 4 and 5. In principle this is exactly like Lesson 6.

HOUSEHOLD ACCOUNTS

RECEIPTS						DATE	ITEMS
Dairy, Poultry		Product		Misc.	Total		
				15 40	15 40		Balance FORWARDED
				30	30	1	On allowance for April
							Shoes for Mabel 3.00; 2 Vests, 1.00
							10 yds Muslin, 1.00; 4 yds Gingham 60¢
						3	Sugar 1.00, Raisins 25¢
							Bill of L N I 1.75 & Successful Farming 1.00
						5	Collection 25¢, Ladies Aid Society 25¢
*	40				40		2 doz Eggs 40¢ (P), Medicine 50¢, Stove Polish 10¢
						6	Doctor 1.00, Ella 25¢, George 50¢, Necktie 25¢
		2			2		5 bu. Potatoes 2.00, Skillet 50¢
		25			25	8	5 Cabbages 25¢, Dress Trim 40¢
							Meat 60¢, Parlor Lamp 3.00
	50				50	9	3 lb Crackers 25¢, Nuts 10¢, Eggs 50¢
							Boys 50¢, Corn Starch 10¢, Kellogg Boy 50¢
						12	Collection 35
				30	30	13	On Allowance; Raley 7.00; Coal 5.00
		40			40		Prunes 1.00, Vegetables 40¢
						14	Suit for William 6.00; Hat for Geo. 75¢
							Concert 1.00; 2 yds Ribbon 40¢
							1 Doz Plates 2.20, ½ doz Cups & Saucers 90¢
						15	School Book & Stationery 2.40, Kerosene 75¢
							Nancy 1.25, Sandals 50¢, Shoe Strings 10¢
						17	Kitchen Cabinet 6.50; 2 Chairs 1.19
							Laundry 95¢, Toilet Soap 25¢
							3 lb Fish 45¢, Towel Rack 25¢
						19	Collection
						20	6 yds Toweling 60¢, Jacks 10¢
							1 gal Vinegar 30¢; Matches 25¢
							White Nobles Cook Book 50, Aid 10¢
						23	Telegram 50¢, Telephone Rental 1.00
							Dress Making 2.50, Mabel & Return 2.00
						25	Rubbers 75¢, Stockings 50¢, Flowers for Mrs Kyle 1.00
				30	30		Allowance, Laundry 65¢, Soap & Wash 10¢
						26	Collection
						29	City Meat Market
							Murdock Grocery Co
						30	Help of the month
		260			260		Vegetables, not entered
5	40				540		Poultry & Eggs
6	50				650		Milk, Cream & Butter
12	80	5	25	105 40	12 345		CARRIED FORWARD

***Entered both as receipt and payment because it is taken from the farm.**

FOR THE MONTH OF April 1908



No.	Total	Groceries	Meat	Dairy Poultry	Clothing	Furniture Utensils	Help Equipment	Library	Light Fuel	Gifts	Phys. & Med.	Personal		Travel Recreation	Incid'l
	4				4										
	1 60				1 60										
	1 25	1 25													
	2 75							2 75							
	50									50					
	1	* 40									50				10
	2				25						1	75			
	2 50	2				50									
	65	25				40									
	3 50		50			3									
	85	35		50											
	1 10	10								50		50			
	35									35					
75	12					7			5						
76	1 40	1 40													
	6 75				6 75										
	1 40				40									1	
	3 10					3 10									
	3 15							2 40	75						
	1 85		1 35		10					50					
	7 80					7 80									
	1 20						95								25
	70		45			25									
	25									25					
	70														70
	55	30							25						
	1 60							1 50							10
	2														2
	4 50				2 50									2	
	2 25				1 25										1
	75						65		10						
	25									25					
77	9 50		9 50												
78	4 40	4 40													
79	10						10								
	2 60	2 60													
	5 40			5 40											
	6 50			6 50											
	111 2 75	13 05	11 80	12 40	16 85	22 05	11 60	6 65	6 10	2 05	1 50	1 25		3	4 15

* 40c. should be classified as Poultry.

CASH BOOK

SUMMARY OF HOUSEHOLD ACCOUNTS March 31, 1909

Accounts	1909 Jan.	Feb.	March	1909 April	May	June	July	August	Sept.	Oct.	Nov.	Dec.	Total
RECEIPTS													
Sundries	9 45	8 35	11 10	12 80	8 55	10 65	11 45	9 80	8 55	10 40	11 50	8 40	121 00
Produce	5 35	3 40	2 80	5 25	4 30	6 40	5 80	6 05	5 20	4 60	3 80	4 95	57 90
Cash	90 00	90 00	90 00	105 40	90 00	90 00	90 00	90 00	90 00	90 00	90 00	90 00	1095 40
Total	104 80	101 75	103 90	123 45	102 85	107 05	107 25	105 85	103 75	105 00	105 30	103 35	1274 30
PAYMENTS													
Sundries													
Investment	1 40	2 40	5 45	2 65	5 30	3 70	2 40	1 05	3 00	1 15	3 20	11 40	43 10
Trade/Rec		1 50	2 00	3 00	1 60			3 20		2 00		5 20	18 50
Personal	1 25	2 80	1 35	1 25	8 00	1 50	2 00	3 40	1 50	2 40	1 50	3 00	29 95
Gifts	50	5 00	11 35	2 35	1 25	5 00	6 30	1 50	2 60	75	2	21 40	60 00
Light, Fuel	4 20	3 20	6 20	6 10	3 00	4 70	3 60	7 20		5 50	6 30	5 20	55 20
Library	3 75	1 40	2 05	6 65	4 90		3 35		75			9 20	32 05
Hsh. Laundry	13 80	14 50	17 30	11 60	12 50	12 00	15 30	18 60	13 40	10 50	11 20	12 30	162 90
Furniture Utensils		18 00	7 60	22 05	1 30		7 40		15 00	3 20		9 60	84 15
Clothing	11 50	20 00	29 00	16 85	7 30	23 25	13 20	7 50	8 40	28 50	5 50	32 40	203 40
Dairy	5 50	5 40	7 20	6 50	4 50	6 00	5 10	6 10	4 45	5 55	6 25	4 65	67 20
Poultry	3 95	4 80	4 65	5 90	4 05	4 65	6 35	3 70	4 10	4 85	5 25	3 75	56 00
Meat	6 30	5 20	13 70	11 80	10 40	11 30	12 70	11 40	8 30	7 20	6 30	10 30	114 80
Groceries	12 35	11 30	12 75	13 05	25 30	16 85	19 30	18 40	15 35	13 40	14 70	19 50	197 25
SPECIAL ACCOUNTS													
Paper Mfg		75	50	1 50			40		75		2 00	1 50	7 40
Telephone	1 50	1 50	1 50	1 50	1 75	1 50	2 00	1 50	1 50	1 75	1 50	2 00	19 50
Musicedison	5 00	5 00							5 00	5 00	5 00	5 00	30 00
Savings Bank		5 00			20 00	8 00		12 00	5 00	15 00	20 00		85 00
Balance													12 90
Total	71 00	107 75	112 60	112 75	101 15	98 45	99 20	95 55	89 10	106 75	90 60	156 40	1274 30

SUMMARY OF HOUSEHOLD ACCOUNTS

II. *Written Work.*

Enter as in Lesson 12 the following Household Receipts and Expenditures:—

March 1. Amount forwarded, $21.60.

(1) Oranges, 25c.; James, 35c.; Codfish, 35c.; Allowance, $30.00; Coffee, $1.00; Bacon, 50c.; Shoe Laces, 10c.; Fish, 25c.; Veal, 10c.; Whalebone, 10c.; Stove Polish, 25c.

(3) Jardinière, 25c.; Collars, 25c.; Tacks, 10c.; Collection, 25c.; Buttons, 10c.; Toothbrush, 25c.; Talcum Powder, 25c.; Stamps, 25c.; Oranges, 25c.; Thread, 15c.; Meat, 50c.; Crackers, 25c.

(7) Help, $1.00; Roast, 55c.; Delineator, 10c.; Pepper, 15c.; Comb, 25c.; Oatmeal, 25c.; Meat, 40c.

(9) Collection, 25c.

(10) Gloves for Ella, 75c.; Postage, 25c.; Starch, 10c.

(12) Chops, 25c.; Beans, 25c.; Mustard, 20c.; Soap, 30c.; Borax, 15c.; Pattern, 45c.; Muslin, 50c.; Music, 20c.; Gasoline, $1.20; Picture Frames, $3.45.

(14) Starch, 25c.; Help, $1.00; Laundry, $1.00; Allowance, $30.00.

(15) Coffee, 35c.; Music, 25c.; Collection of Poems, $1.50.

(16) Collection, 25c.

(17) Telephone Rental, $1.50; Steak, 30c.; Rocker, $3.75; Suit for George, $15.00; Skirt Cleaned, 75c.; Cheese, 50c.; Tongue, 25c.; Thread, 10c.; Toothpicks, 10c.; Sugar, $1.00; Medicine, 50c.

(19) Lemons, 20c.; Lace, 15c.; Telegram, 60c.; Scissors Sharpened, 10c.; Flour, $1.20; Graham, 25c.; Rock Candy, 10c.; Coal, $5.00; Powdered Sugar, 25c.; Granulated Sugar, $1.00; Piano Tuned, $5.00; Oranges, 25c.; Birthday Present to Mother, $5.00.

(21) Laundry, 55c.; Help, 75c.; Pens and Pencils, 10c.; Hat, $4.00; Hooks and Eyes, 10c.; Collar, 35c.; Sugar, $1.00; Crackers, 10c.; Cheese, 25c.; Mustard, 10c.

(23) Collection, 25c.

(24) Braid, 45c.; Fish, 15c.; Coffee, 45c.; Picture of Baby,

$1.50; Asbestos Pad, 15c.; Roast, 45c.; Oranges, 20c.; Allowance, $30.00.

(26) Help, $2.00; Tailoring, $1.45; Pepper, 10c.; Needles, 10c.; Trip to Boone, $2.00; Hats for George and James, $3.50.

(28) Ella, $1.00; Shoes Repaired, $1.25; Flower Seed, 25c.; Braid, 15c.; Thread, 10c.

(29) Help for month, $10.00; Laundry, $1.00.

(30) Collection, 35c.

(31) Butter, Milk, and Cream for month, $6.45; Poultry for month, $4.65; Vegetables for month, $2.80.

Add all the columns. The results should be: Receipts.—Cash, $111.60; Garden, $2.80; Dairy, $6.45; Sundries, $4.65. Expenditures.—Groceries, $12.75; Meat, $3.70; Poultry and Dairy, $11.85; Clothing, $29.00; Furniture and Utensils, $7.60; Help and Laundry, $17.30; Books and Education, $2.05; Physician and Medicine, 50c.; Light and Fuel, $6.20; Gifts, $6.35; Personal, $1.35; Incidental, $13.95. Balance as before.

LESSON 14

CONTINUED INVENTORY

I. *General Instructions.*

Where the farmer keeps only a bank account and a detailed inventory, it is advisable to keep the inventories in the continued form, illustrated on page 17. It is well, also, to use the first column for memoranda of dates of purchase, births, etc. The ordinary Trial Balance Book, which may be purchased in any stationery store, at a very reasonable price, is the best book for the purpose.

II. *Written Work.*

Prepare a continuous inventory from Statements Nos. 1, 2, and 4 similar to the illustration on page 17.

Supplementary Exercises

To be assigned at the discretion of the instructor.

1. ORIGINAL FARM ACCOUNTS

In order to gain additional practice and confidence in your work, you may now prepare an original set similar to the ones already worked out. Study over the work already completed, and if you have any suggestions and criticisms of the system of accounts, talk them over with your instructor. If your suggestions are acceptable, you may embody the changes in this set, otherwise you will follow the preceding sets very closely. The complete set must have at least five entries in each column, and the totals should not be far from those in the sets already completed. A higher grade of work is expected than heretofore.

Directions.

1. Prepare an inventory similar to the one shown on page 17. The amounts should be close to the results given in Lesson 1.
2. Write two months' imaginary entries as close to actual experience as possible. Students from the farm should secure the material from home or from farmer friends.
3. Complete the year's work by taking estimates for the remaining months.
4. Prepare a closing inventory for the end of the year.
5. Prepare a statement similar to the one given on page 47.
6. Hand in your work with suggestions and criticisms.

2. ORIGINAL HOUSEHOLD ACCOUNTS

Prepare an original household record on the same plan as the original farm record. The totals should conform approximately with one of the months in the household summary.

Hand in your work for approval.

3. ORIGINAL BALANCE SHEET

Prepare a balance sheet of the work done in the two preceding lessons, exactly like the one you prepared last, and hand in for approval.

4. SHOP ACCOUNTS

Farm and shop bookkeeping do not differ in principle. They differ only in titles of accounts. The books used are the same as in the farm accounts, except special records adapted to the needs of the shop. The labor record need not differ at all. Taking the Cash Book furnished in your set, note that the number of columns and the arrangement are exactly the same as in the farm accounts. Only the titles of the columns are different. The titles given below are self-explanatory, except the Merchandise and the Supply column. A large number of shops and mills carry a small stock of merchandise which is sold at retail. Where this is done, it is preferable to keep it strictly separate from the manufacturing end of the business. The shop should buy from the store at regular prices, and charge it with any supplies furnished for sale. Where it is found impracticable to keep a separate set of books, a column is provided for receipts from merchandise sold and one for payments for merchandise purchased. Taking into account the inventories at the beginning and end of the year, these columns give the result of this branch of the business. In the Supplies column is entered only consumable material used in the process of manufacture, such as oil, cotton waste, sandpaper, files, and the like. The Sundries column is used for all items which do not fall under any special column. For instance, if interest is paid on a note, it is entered in the Total Payments column and also in the Sundries column. It is frequently necessary to show hospitality in closing deals in which a shop of any consequence is interested. Such entertainment expenses would be entered in the Sundries column.

Directions.

1. Head all the columns in the Cash Book as follows: Under Receipts—Merchandise, Manufacturing. Under Payments—Hardware, Lumber, Supplies (Machinery and Tools), Repairs, (Buildings and Improvements), Labor, (Freight and Express), Office, (Light, Fuel, and Power), Merchandise.

2. Prepare an imaginary inventory of a planing mill, with $10,000.00 capital, having a merchandise inventory of

$2,000.00 consisting of house fittings, light hardware, etc. Use the form illustrated on page 18.

3. Write up an imaginary month's business of receipts and payments, taking care that there be at least two entries illustrating each column. Follow the plan illustrated on pages 44 and 45.

4. From the above figures prepare a probable estimate of the year's business.

5. Prepare a statement similar to the one shown on page 47.

6. Hand in your work for approval and criticism.

LESSON 15

REVIEW QUESTIONS

Write the following questions and their answers on paper 8½ x 11 inches and submit to your teacher for approval:—

1. What is the object of keeping books?
2. What is the use of the Day Book? Prepare a specimen Day Book page of at least five entries.
3. What entries are properly made in the Day Book?
4. Describe the Bill and Receipt File and explain its use.
5. How is an inventory taken? Of what does it consist?
6. What are Resources? Liabilities? Profits? Losses?
7. What are Accounts Receivable? Accounts Payable?
8. Prepare a specimen Account Receivable and also a specimen Account Payable.
9. What should determine the time of the year when the farm balance sheet is taken?
10. What are the disadvantages of single entry?
11. Prepare a specimen of each of the special records suggested on pages 102 to 105.
12. Which is the principal book in the second method (modified double entry)?
13. What is the value of the special column provided in the Journal? Suggest columns that might be added.
14. How is each side of the Cash Book balanced?
15. How do you find the cash on hand?

16. If a bank account is kept, how do you find the cash on hand?

17. Describe how household accounts are kept.

18. What allowance for household besides cash? Why are these allowances both debited and credited at the time they are entered? How are these allowances entered in the general Cash Book?

19. How is the cash on hand found in the household accounts?

20. Describe how the Sundry columns are itemized.

21. Of what three principal headings does the financial statement consist?

22. State the steps necessary in preparing the financial statement.

23. State some of the advantages of banking.

24. What is meant by depreciation? What are the rates commonly used?

25. How may land be said to depreciate in value?

26. Describe three methods of finding the profit, or loss, from live stock. From different crops.

27. What is the principle difference between farm and shop accounts?

28. How may a large crop prove to be a loss to the community?

29. Write a paragraph pointing out the importance of records for the farmer.

30. Write a paragraph of general review of the system of bookkeeping you have now finished, and point out its merits and defects.

31. In finding the actual net gain or loss on accounts of production, what corrections must be made?

32. Give the rule for finding the profit or loss in the balance sheet.

33. What is the distinction between equipment and supplies?

34. What is the distinction between improvements and repairs?

THIRD METHOD

A system of double entry, best adapted to a business having a large number of personal accounts. The Ledger is the basis of the system; the Journal is a modification of the Day Book, containing the original entries, the cash account, and the classification of entries.

CHAPTER V

DOUBLE ENTRY

In a credit business, where the titles of accounts are numerous and where goods are bought and sold on account, it is necessary to use a Ledger instead of special columns in the Cash Book. The two methods are often combined by carrying the details of certain accounts in special columns in the Journal and Cash Book and posting only the totals into the Ledger. The Ledger is practically always used in commercial bookkeeping. The only essential difference between commercial and farm bookkeeping lies in the titles of accounts. The chief sources of the farmer's profit are generally shown under crops, live stock, dairy, etc.; that of the merchant under merchandise; those of the banker under interest, discount, and so on. The principles of accounting are the same in all cases.

Books and Accounts

The double entry Journal and Ledger will be employed in this method. Since it is designed to illustrate a variety of titles, the expense account has been divided into freight, interest, discount, and general expense, while the trading account is divided into grain and feed, and produce. The accounts are further discussed in Lesson 17.

The Journal

The Journal is a book of record in which entries are arranged under debits and credits in a convenient form for posting. The simplest form has two money columns, one for debits and the other for credits, but it is often convenient to use special additional columns for accounts having frequent entries, such as cash, etc., as illustrated on page 78.

The Ledger

The Ledger is a book of record in which entries are classified under separate heads or titles called accounts. The left

side of the account shows the debits and the right side the credits. (See page 77.) A Ledger account is balanced by deducting the smaller side from the larger, as shown on page 82. A double entry Ledger must be in balance at all times; that is, the debits must equal the credits.

Terms and Definitions

One object of this set is to familiarize the student with terms frequently used in business. The following list of terms should be learned thoroughly in connection with Lessons 16 and 17.

Account.—A collection of debits and credits under one title, such as cash, produce, merchandise, John Jones, etc.

Accounts Receivable.—Amounts due the business from others.

Accounts Payable.—Amounts due others from the business.

Allowances.—Amounts paid for the use of money or services, such as interest, discount, taxes, etc.

Assets.—The property or capital of the business.

Balance Sheet.—A formal statement of the results of a business for a given period, usually shown under resources and liabilities, losses and gains, net worth or net insolvency.

Balance.—The difference between the debits and credits in an account.

Bank.—A market for money and credit; an institution for the safe keeping of money.

Bills Payable.—Signed obligations due others.

Bills Receivable.—Signed obligations due the business.

Bookkeeping.—A record of business transactions.

Business Transaction.—Exchange of values or services.

Capital.—The amount invested in a business.

Cash.—Money and negotiable papers payable at sight, used as money, such as checks, bank drafts, money orders, etc.

Cash Book.—A record of cash receipts and payments.

Credit.—A statement of obligations by the business, of a gain, or of goods parted with.

Debit.—A statement of obligations to the business, of a loss, or of goods received.

Discount.—An allowance paid for the advance of money or for payment of bills in advance of due date.

Double Entry.—A system of bookkeeping in which the debits always equal the credits, and in which accounts are kept with persons, things, and allowances.

Draft.—An order of one party on a second to pay money to a third party.

Drawee.—The party who pays a draft.

Drawer.—The party who issues a draft.

Expenses.—Costs of conducting the business.

Good Will.—An amount which a business is assumed to be worth above the net property assets. It depends on the earning capacity of the business.

Insolvency.—The net amount by which the liabilities exceed the assets.

Interest.—The amount paid for the use of money.

Inventory.—A statement of the assets and liabilities of the business.

Invoice.—An itemized statement of goods bought or sold.

Journal.—A book in which entries are arranged under debits and credits in a convenient form for posting.

Ledger.—A book in which entries are classified under separate heads or titles called accounts. The left side of the account shows the debits and the right side shows the credits.

Liabilities.—Accounts and obligations due others from the business.

Merchandise.—Goods bought and sold for profit.

Payee.—The party to whom payment is made.

Posting.—Entering debits and credits under the respective accounts in the Ledger.

Principal Books.—Books from which or to which posting is done.

Present Worth.—The excess of assets above liabilities.

Resources.—Same as assets.

Single Entry.—A system of bookkeeping in which accounts are kept with persons only.

Trial Balance.—A comparison of the debits and credits of the Ledger in order to ascertain their equality.

Voucher.—A written statement or evidence of a business transaction.

General Principles

(1) In the ordinary Journal and Ledger method of double entry bookkeeping there are one or more debits and one or more credits involved in every transaction, and *the debits always equal the credits.* (2) In double entry accounts are kept, not only with persons, but also with property and allowances.

ILLUSTRATIONS

(*a*) Smith buys a Jersey cow for which he pays cash, $65.00. Here Live Stock is debited *because it comes into our possession,* and Cash is credited *because it goes out of our possession.* (See illustration, page 77.)

(*b*) Smith hands his wife $30.00 for household use. Here Household is debited because it was the cause of an outlay, and Cash is credited because it went out of our possession. The $10.00 expended on crops, page 77, is treated in a similar manner.

(*c*) Smith sold 80 bu. Corn for $52.00 cash. Here Cash is debited *because it comes into our possession* and Crops are credited *because corn goes out of our possession.* Grain might have been used as the title of the account instead of Crops; Hay, Seed, Fruit, Vegetables, etc., are other titles which might be used, according as the farmer desires minute classification or more general accounts.

General Rules for Journalizing

DEBIT (always left side)	CREDIT (always right side)
1. *Things* that come into our possession.	2. *Things* that go out of our possession.
3. *Persons* who get into our debt, or when we get out of their debt.	4. *Persons* who get out of our debt, or when we get into their debt.
5. *Allowances,* when allowed to others.	6. *Allowances,* when allowed to us.

The General Law of Debit and Credit

The foregoing rules may be stated in the form of a general law, as follows:—

Debit whoever or whatever *causes* an outlay or a decrease in assets.

Credit whoever or whatever *causes* an income or an increase in assets.

EXERCISE

Suppose we have the following transactions during the month of April, 1909, and we decide to record them in a Journal and Ledger:—

April 1. Bought 12 bu. Seed Wheat for cash, $10.00; sold 2 tons Clover for cash, $12.00; paid $30.00 for Household Expenses; sold 80 bu. Corn @ 65c.— $52.00.

(5) Bought 1 Jersey Cow for cash, $65.00.

(6) Sold 2 Steers for cash @ $40.00.

(7) Sold 100 bu. Corn to J. N. Smith on account @ 65c.

Prepare the journal entries. Study the form on page 75 and apply the rules for journalizing.

Posting

Posting is the transferring of debits and credits from other books into the Ledger under individual titles called accounts. Since all the debit items are found in the left money columns in the Journal and all the credit items in the right columns, it is evident that they should occupy the same columns in the Ledger. Trace the above entries into the Ledger on page 77.

4 April 1, 1909

L.F.	Dr.	Cr.		Dr.	Cr.
2	Crops		Bought 12 bu. seed wheat for cash. @ 10¢	10	
2		Cash			10
2	Cash		Sold 2 tons clover for cash. @ 12¢	12	
2		Crops			12
2	Household		Paid @ 30¢ for household effects	30	
2		Cash			30
2	Cash		Sold 80 bu. Corn @ 65¢. @ 52¢	52	
2		Crops			52
2	Stock		Bought of Jones Corn for cash @ 65¢	65	
2		Cash			65
2	Cash		Sold 2 steers for cash @ 40¢	80	
2		Stock			80
3	J. N. Smith		Sold 100 bu. Corn to J. N. Smith on acct at 65¢	65	
2		Crops			65

COMMON DOUBLE ENTRY JOURNAL

Illustrative Lessons

LESSON 16

JOURNALIZING

I. *General Instructions.*

Journalizing is arranging debits and credits in a convenient form for posting. Use four-column Journal paper. If this is not furnished in your outfit of blanks, rule additional columns to correspond with the illustration, page 17. Follow the directions and rules given on page 73. Skip one line between each entry, placing the date on this line, as illustrated on page 78. All cash is entered in the first two money columns, and all other amounts in the next two columns. Copy the opening paragraph in the explanation column. The Day Book part is written first and the Ledger titles immediately below, as illustrated. Many bookkeepers post without journalizing, directly from the invoice or Day Book, but for the beginner it is preferable to use the Journal.

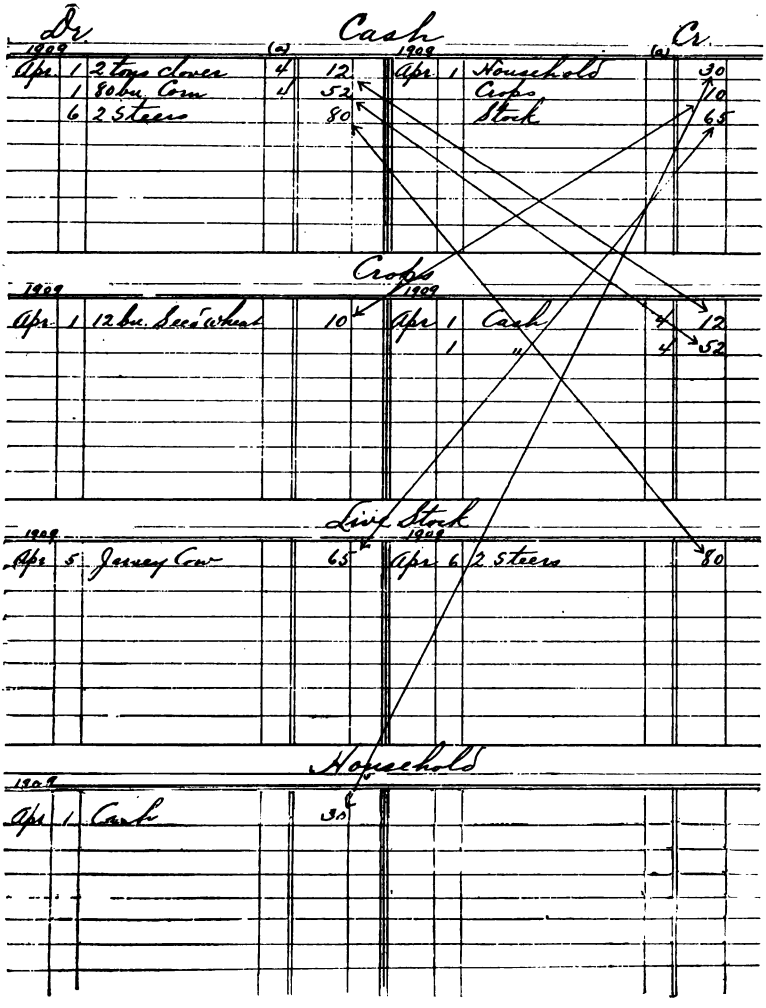
II. *Written Work.*

Following are extracts from your Day Book, as produce merchants, which you will now journalize:—

JUNE 1, 1910.

Student (write your name) and Edward Harvey have this day formed a copartnership under the firm name of Student & Harvey, for the purpose of conducting a feed and produce business at Auburn, Ill. Each partner invests $3,000.00 cash. The profits and losses are shared equally. The student is to receive $100.00 a month for his services and Mr. Harvey $80.00 a month. The student is a skilled accountant and will have general charge of the office. (Write the opening entry in the Journal as illustrated on page 18.)

(1) Each partner has paid his investment. (Dr. Cash; Cr. each partner. Rules 1 and 4, page 73.) Deposit $6,000.00 in the First National Bank. Keep a special bank account, as illustrated on page 26. No entry of deposits is required in the Journal.



DOUBLE ENTRY LEDGER

June 1, 1910

L. Fol.	Items & Titles	Cash Rec'd (Dr.)	Cash Paid (Cr.)	Other than Cash Dr.	Other than Cash Cr.
	(Copy opening statement)				
	1				
	Each partner has paid his investment				
	Cash	6000			
1	Student				3000
1	Edward Harvey				3000
	2				
	Bought store and fixtures of Wm. Hayward & Co. 110 W. Green st. Bldg. & Lot $2000. Furn. & Fix. $500. Paid $1000; gave our note due in 60 days for balance				
1	Real Estate			2000	
1	Furniture & Fixtures			500	
	Cash		1000		
3	Bills Payable				1500
	3				
	Rented store room, No. 9 Canal st. for $40.00 a month. Paid one month				
3	Expense			40	
	Cash		40		
	4				
	Bought of Wilbur Johnson etc., etc.				
	- - - - - - - - - - - - - - -				
	(At the end of month enter:)				
	29				
	Balance for next page		19367		
		6955 12	6955 12		

DOUBLE ENTRY JOURNAL

Deposit all cash as it comes in and make all payments by check.

(2) Bought store and fixtures of Wm. Hayward & Co., 110 W. Green St.: Building and Lot, $2,000.00; Furniture and Fixtures, $500. Paid (check No. 1) $1,000.00; gave our note, due in 60 days, for the balance. (Dr. Real Estate, and Furniture and Fixtures; Cr. Cash and Bills Payable. Rules 1 and 2, page 73.)

(3) Rented store room, No. 9 Canal St., for $40.00 a month. Paid one month in advance. (Dr. Expense; Cr. Cash. The expense account is sometimes divided into Rent, Salaries, Light and Fuel, etc., but here the expense account includes all such items.)

(4) Bought of Willard Johnson, Ames, Iowa, on account: 20 tons Timothy Hay @ $15.00; 25 tons Prairie Hay @ $12.00. (Dr. Grain and Feed; Cr. Willard Johnson.) Paid freight on above, $85.00. (Dr. Freight; Cr. Cash.) Sold to Richard Morris, 340 W. 10th St., on account: 10 tons Timothy Hay @ $18.00. (Dr. Richard Morris; Cr. Grain and Feed.)

(5) Sold to John Rollins, 432 E. 5th St., on account: 5 tons Prairie Hay @ $15.00.

(6) Paid Willard Johnson for invoice of June 4. Bought of Winkle Elevator Co., Bancroft, Iowa: 1 car Wheat, 997 bu. @ 97c.; 1 car Barley, 830 bu. @ 51c.; 1 car Corn, 1,073 bu. @ 69c. (Freight prepaid; Dr. Grain and Feed; Cr. Winkle Elevator Co.)

(8) Received cash of Richard Morris, on account, $100.00.

(9) Sold to Star Milling Co., Detroit, Mich., on account: 500 bu. Wheat @ 99c. Received of John Rollins his note, due in 10 days, payable at Citizens' National Bank, in full of his account; interest, 6 per cent.

(10) Bought of Horton, Brown & Co., Spring Valley, Iowa, on account: 1,500 doz. Eggs @ 21c.; 500 lbs. Butter @ 27½c.; 100 lbs. Y. A. Cheese @ 15c. Paid

Freight on above, $3.50. Paid Cramer & Co. for Office Supplies, $15.00. (Dr. Expense; Cr. Cash.) Sold to Hotel Emery, on account, 90 doz. Eggs @ 25c.

(11) Accepted Horton, Brown & Co.'s draft on us in favor of Richard & Lytton, at 3 days' sight, payable at Citizens' National Bank, for amount of invoice of June 10. (Dr. Horton, Brown & Co.; Cr. Bills Payable.) Sold to Western Produce Co., Chicago, on account: 900 doz. Eggs @ 25c.; 300 lbs. Butter @ 29c.

(12) Paid Winkle Elevator Co., on account, $1,000.00.

(13) Sold to Chicago Malting Co., on account, 415 bu. Barley @ 60c. Received remittance from Star Milling Co., in full of invoice of June 9.

(15) Paid our acceptance of June 11, due to-day. Gave Winkle Elevator Co. our note at 30 days, payable at First National Bank, for balance of account.

(16) Gave Edward Harvey a check of $100.00 for his private use. (Dr. Edward Harvey; Cr. Cash.)

(17) Sold to Empire Livery, on account, 300 bu. Corn @ 75c.

(18) Sold to G. W. Gardner, for cash, 25 bu. Corn @ 74c. (Dr. Cash; Cr. Grain and Feed.)

(19) Received cash of John Rollins for his note due to-day, with interest at 6 per cent. (Dr. Cash; Cr. Bills Receivable and Interest.)

(20) Sold to Henry Simmons' Sons 300 bu. Barley @ 60c. They paid $100.00, balance on account. (Dr. Henry Simmons' Sons, $80.00, Cash, $100.00; Cr. Grain & Feed, $180.00.)

(22) Sold to Condon Construction Co., on their 60-day note: 10 tons Prairie Hay @ $12.25; 10 tons Timothy @ $15.00; 300 bu. Corn @ 75c.

(23) Student renders an itemized bill for small expense items paid in cash as follows: Stationery, $3.25; Collections and Exchange, $3.40; Entertainment, $5.40; Postage, $3.00; Telegram, $1.75; total of Check, $16.90. (Dr. Expense; Cr. Cash.)

(24) Paid for 6 tons Coal @ $4.00, for use in store.

(25) Sold to Hotel Emery, on account: 50 doz. Eggs @ 25c.; 105 lbs. Butter @ 30c.

(26) Bought of Iowa Produce Co., on account: 100 boxes Gano Apples @ $2.50; 100 boxes Mo. Pippins @ $2.25; 50 boxes Winesaps @ $3.50; 25 crates Pineapples @ $1.75. Paid Freight on above, $11.30.

(27) Prepaid our note in favor of Wm. Hayward & Co., given June 2, for which they allow a discount of 6 per cent. to maturity—35 days. (Dr. Bills Payable; Cr. Cash and Discount.)

(29) Sold to H. E. Johnson, 27 Canal St., on account: 25 doz. Eggs @ 25c.; 50 lbs. Cheese @ 17c.

(30) Credit each partner with his salary as per articles of copartnership. (Dr. Expense; Cr. each partner.) Paid monthly dues and expenses as follows: Telephone Rental, $3.00; Commercial Club, $5.00; Pay Rolls for June, $150.00; Water Rent, $4.00. (Dr. Expense; Cr. Cash, four checks.)

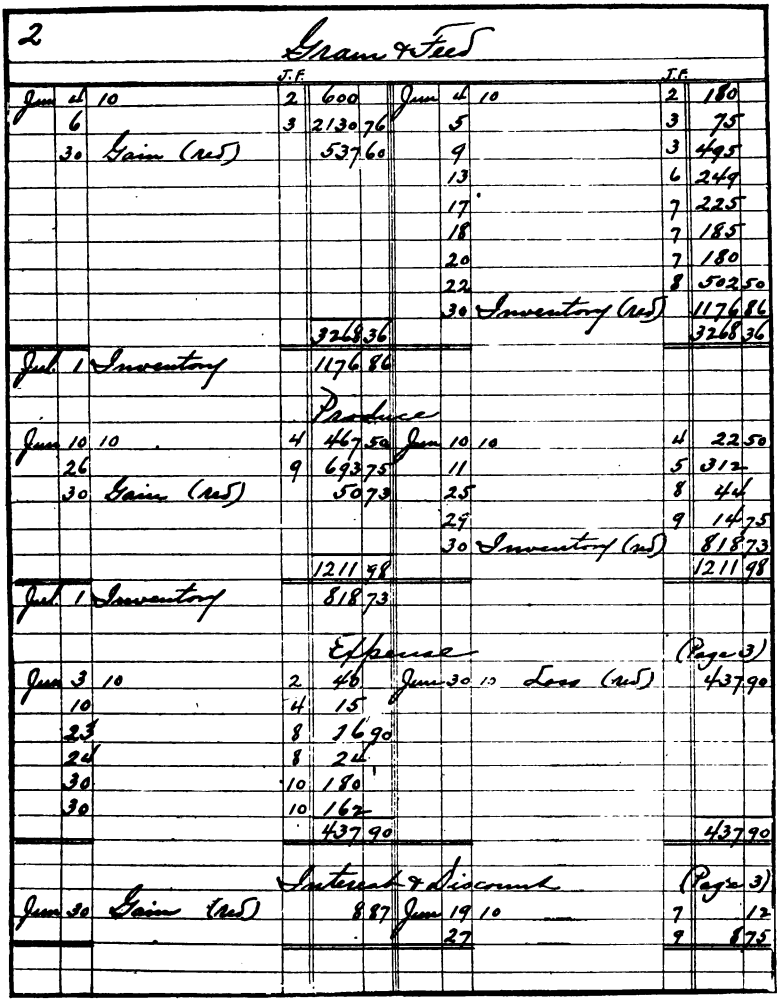
Now add all the columns of the Journal and see if the sum of the two debit columns equals the sum of the two credit columns. The cash balance should be $1,938.67.

LESSON 17

POSTING

I. *General Instructions.*

As explained on page 72, posting consists of transferring debits and credits from other books into the Ledger. The left half of the Ledger page is devoted to the debits and the right half to the credits. Every amount found in the Journal debit columns must be found on the debit side of the Ledger (either in individual items, or in totals) under the appropriate account; and all credit items in the Journal must be found on the credit side of the Ledger. It is, therefore, evident that since the Journal balances, the Ledger will also balance, if the work is correct.



2

Grain & Feed

			J.F.						J.F.		
Jun	4	10	2	600		Jun	4	10	2	180	
	6		3	2130	76		5		3	75	
	30	Gain (net)		537	60		9		3	495	
							13		6	249	
							17		7	225	
							18		7	185	
							20		7	180	
							22		8	502	50
							30	Inventory (net)		1176	86
				3268	36					3268	36
Jul.	1	Inventory		1176	86						

Produce

Jun	10	10	4	467	50	Jun	10	10	4	22	50
	26		9	693	75		11		5	312	
	30	Gain (net)		50	73		25		8	44	
							29		9	14	75
							30	Inventory (net)		818	73
				1211	98					1211	98
Jul.	1	Inventory		818	73						

Expense

(Page 3)

Jun	3	10	2	46		Jun	30	10	Loss (net)	437	90
	10		4	15							
	23		8	16	90						
	24		8	24							
	30		10	180							
	30		10	162							
				437	90					437	90

Interest & Discount

(Page 3)

Jun	30	Gain (net)		887		Jun	19	10		7	12
							27			9	875

DOUBLE ENTRY LEDGER

II. *Written Work.*

1. Study very carefully page 82 and note how the titles are written. Note that the cash items in the Journal are not posted separately, but only the totals at the end of the month.

2. Take three sheets of Ledger paper and number the pages from 1 to 6. On the first page give one fifth page to each of Student, Edward Harvey, Cash, Real Estate, and Furniture and Fixtures; page 2, give equal space to Grain and Feed, and Produce; page 3, equal space to Bills Receivable, Bills Payable, Expense, Freight, Interest and Discount; pages 4 to 6, one fifth page to each personal account as they occur.

3. You are now ready to post. Place the Ledger to your right and the Journal to your left. Turn to Student's account and in the date column write July 1, 1910; in the folio column, 1 (meaning that the entry is found on page 1 in the Journal); in the amount column, $3,000.00. Now write 1 to the left of your name in the Journal, indicating that the amount is posted on the first page of the Ledger. *This is very important.* Next turn to Edward Harvey and post this item in the same manner. In the same way proceed with all the credit items. The last item to be posted is the total credit of cash, $5,016.45, under June 30. The numbers in the folio columns will be the same until new pages are turned. The number opposite the entry in the Journal is always the page of the Ledger on which the account appears. Add the totals of the Ledger accounts and observe that the grand total equals the total of the credit columns of the Journal.

4. Proceed in exactly the same manner with posting the debit entries and prove your work the same as the credits. If the debit and credit postings are equal, your work is probably correct, though amounts may have been posted to the wrong account. Such errors could not be detected except by checking.

5. Observe that several accounts balance, such as Horton, Brown & Co., Willard Johnson, and others. Draw a red line across the money columns under the last amount on both sides of all accounts which balance. Accounts having a number of entries on either or both sides should be totaled and the

Illustrative Lessons

LESSON 16

JOURNALIZING

I. *General Instructions.*

Journalizing is arranging debits and credits in a convenient form for posting. Use four-column Journal paper. If this is not furnished in your outfit of blanks, rule additional columns to correspond with the illustration, page 17. Follow the directions and rules given on page 73. Skip one line between each entry, placing the date on this line, as illustrated on page 78. All cash is entered in the first two money columns, and all other amounts in the next two columns. Copy the opening paragraph in the explanation column. The Day Book part is written first and the Ledger titles immediately below, as illustrated. Many bookkeepers post without journalizing, directly from the invoice or Day Book, but for the beginner it is preferable to use the Journal.

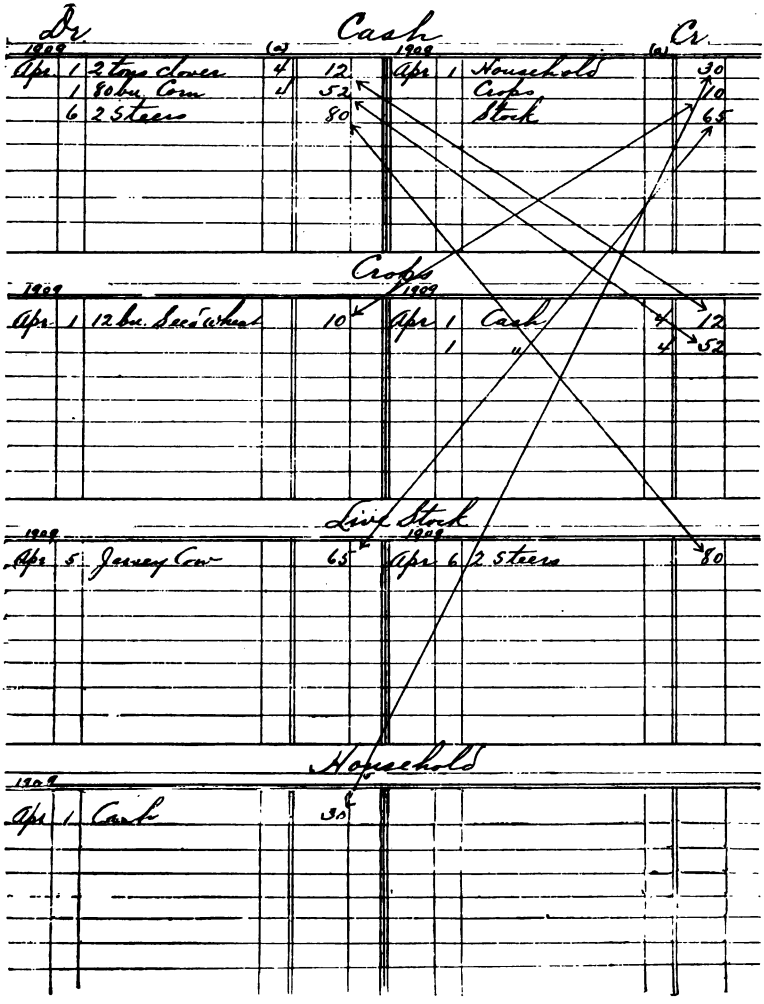
II. *Written Work.*

Following are extracts from your Day Book, as produce merchants, which you will now journalize:—

JUNE 1, 1910.

Student (write your name) and Edward Harvey have this day formed a copartnership under the firm name of Student & Harvey, for the purpose of conducting a feed and produce business at Auburn, Ill. Each partner invests $3,000.00 cash. The profits and losses are shared equally. The student is to receive $100.00 a month for his services and Mr. Harvey $80.00 a month. The student is a skilled accountant and will have general charge of the office. (Write the opening entry in the Journal as illustrated on page 18.)

(1) Each partner has paid his investment. (Dr. Cash; Cr. each partner. Rules 1 and 4, page 73.) Deposit $6,000.00 in the First National Bank. Keep a special bank account, as illustrated on page 26. No entry of deposits is required in the Journal.



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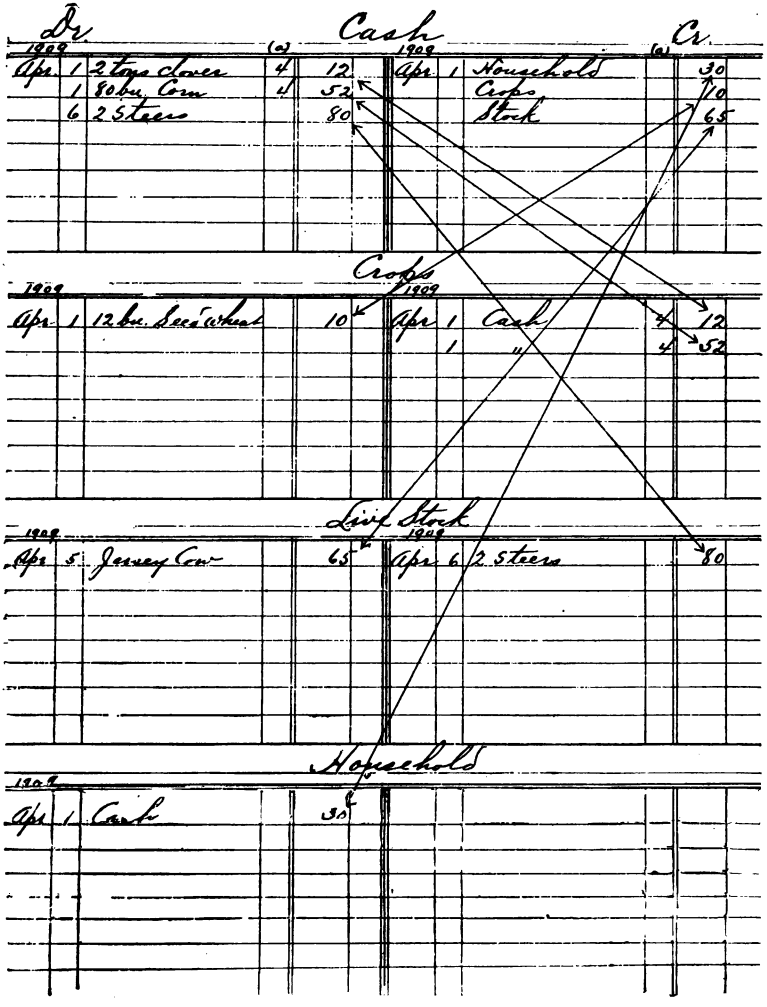

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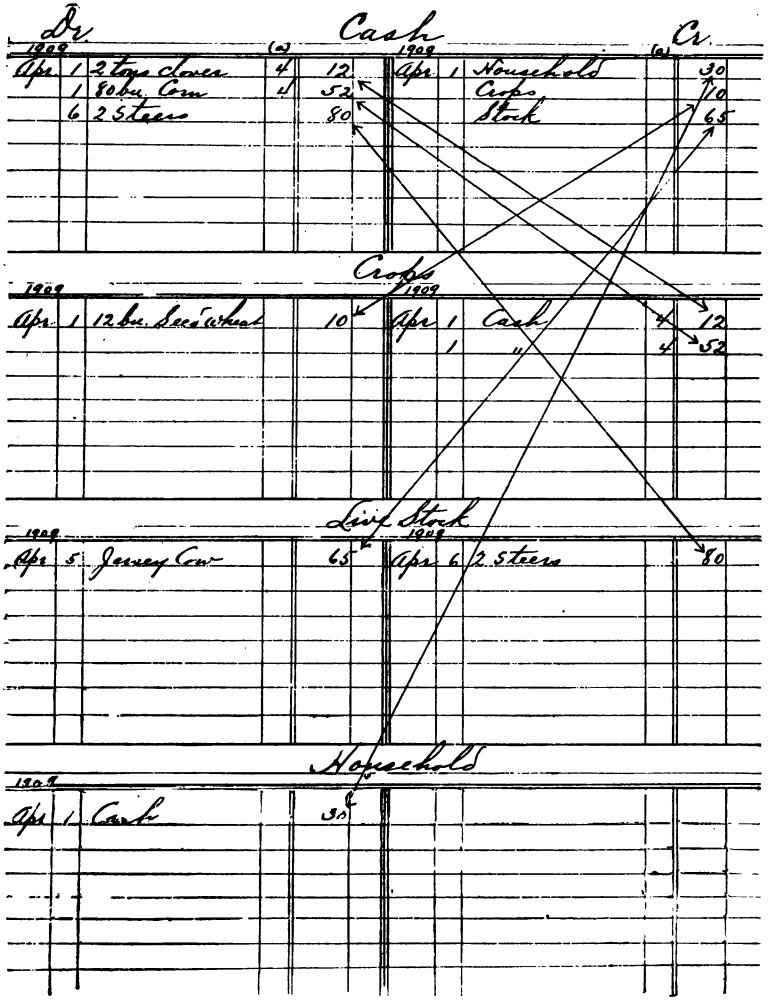


DOUBLE ENTRY LEDGER

COST ACCOUNTS AND SPECIAL RECORDS

CHAPTER VI

COST OF PRODUCTION

Too often a good farm is compelled to carry unprofitable experiments and the whole business is pronounced a failure without an adequate attempt to find a remedy. In addition to the foregoing records (Second Method), Mr. Harris has kept accurate cost accounts of the main branches of his business. In cost accounting there are four principal elements to consider: Cost of material, labor, interest, and depreciation. The cost records are independent of all the rest and may be kept of every branch of the business, if desired, or limited to one or more phases. In this instance cost records have been kept of live stock, grain, hay, dairy products, and improvements. The Agricultural Experiment Stations are always willing to give the farmer important advice and assistance regarding the stock, grain, fruit, etc., best adapted for different localities and purposes. But conditions frequently arise where it is important for the farmer to carry on his own experiments. Your own Experiment Station will doubtless be glad to coöperate and suggest methods for carrying on such experiments even to the extent of furnishing necessary blanks and material. Important bulletins on the subject may be had for the asking from the Department of Agriculture, Washington, D. C.

The following announcement in the Crop Reporter for May, 1908, indicates what the government is doing in this direction:—

"Cost of Producing Farm Products"

"The Bureau of Statistics is making an investigation of the cost of producing farm products in different parts of the United States. Blank forms have been printed upon which

to make reports, and this Bureau desires to receive the names of such farmers as have kept records of cost of producing crops, or are well informed upon the subject of cost of crop production in their locality, in order that blank schedules may be sent to them to fill in. Individual reports will not be published—only the average of many reports. Names should be sent to the Bureau of Statistics, Department of Agriculture, Washington, D. C."

Every farmer should avail himself of this important free service. "Keeping posted" is one of the characteristics of the progressive and successful farmer. There are three exceptionally valuable bulletins on the subject which ought to be in the library of every farmer: U. S. Department of Agriculture, Bureau of Statistics, Bulletin No. 48, and University of Minnesota, Agr. Ex. Station, Bulletins Nos. 73 and 97.

Cost of Live Stock

Either of three methods may be employed in finding the cost of live stock:—

First Method.—Ascertain exactly the total amount of grain, hay, and roughage on hand at the beginning of the year, and produced during the year. From this subtract the quantity sold, including amount used by household and for seed, and the amount on hand at the end of the year. The difference is the quantity used for live stock. The value at market prices is the expenditures of feed for live stock.

Find the total amount received for dairy products, including amount used by the household. The difference between the cost and the receipts is the gain. The disadvantages of this method are that no account is taken of individual animals nor of different kinds of stock. The herd as a whole may be a paying investment and still there may be individual animals carried at a loss. It is desirable that such records be kept, at least occasionally, as will enable the farmer to eliminate unprofitable animals.

Second Method.—The following actual record of a dairy herd of twelve cows illustrates a much more satisfactory test than the preceding. Individual record was kept of the milk produced by each cow, but the feed was weighed for the

entire herd, and the average cost charged to each animal at market prices.

Tests of Dairy Herd for March, 1909

No. Cow.	Lbs. Milk for Mo.	*Test.	Lbs. Fat.	Val. at 36c.	Cost of Feed.	Net Profit.
1	465	4.5	20.93	$7.53	$6.21	$1.32
2	372	5.0	18.60	6.70	6.21	.49
3	620	5.0	31.00	11.16	6.21	4.95
4	372	7.0	26.04	9.37	6.21	3.16
5	496	4.8	23.80	8.57	6.21	2.36
6	682	4.7	32.05	11.54	6.21	5.33
7	558	4.4	24.55	8.44	6.21	2.23
8	620	4.1	25.42	9.15	6.21	2.94
9	496	4.2	20.83	7.50	6.21	1.29
10	651	4.9	31.90	11.48	6.21	5.27
11	558	5.0	27.90	10.04	6.21	3.83
12	589	5.0	29.45	10.60	6.21	4.39

*These figures were obtained by the Babcock test, which is described in every modern work on dairying. It may be seen in any creamery.

Feed for the Month of March

Hay, 4,900 lbs. @ $9.00 per ton	$22.05
Kale, 9,600 lbs. @ $2.50 per ton	12.00
Bran, 1,800 lbs. @ $30.00 per ton	27.00
Shorts, 900 lbs. @ $30.00 per ton	13.50
Total	$74.55

$74.55 divided by 12 equals $6.21, average cost of feed.

With this average before him, a careful feeder will be able to make mental corrections for each individual animal, accurate enough for most practical purposes. The milk record has been kept, as illustrated on page 102.

Third Method.—The difference between the second and third methods is that in the latter accurate records are kept of individual feed rations, while in the second method an average is taken. The error resulting from averaging the feed between all the animals in a large herd may be such as to unduly favor certain animals and do injustice to others. The only absolutely accurate method is to keep an account with each animal,

at least with such animals as show a tendency to be unprofitable. Page 97 shows an individual account with one of the milch cows on the Harris farm. It is arranged on the regular Ledger form. Opposite pages of the Day Book may also be used. The detailed information regarding feed, milk, labor, etc., is found in the respective records, illustrated on pages 102 and 103. Similar accounts are kept of each animal, tested preferably during the entire lactation period. It is only in this way that the careful farmer can determine whether each animal is kept at a gain or a loss. The weeding out of one or two unprofitable animals a year will pay for the labor of keeping the cost records many times over.

Extension Bulletin No. 3, Iowa State College, says on this subject:—

"There are a variety of different methods used among successful dairymen for securing records of their cows. When accurate records are imperative it is necessary to weigh and sample each cow's milk at each milking. For all practical purposes, however, it is not necessary to weigh and sample the milk from each cow oftener than twice a day for three days of each month. Usually samples are taken on the first, tenth, and twentieth of each month, thereby making six milk weights on the record sheet and six separate samples of milk which have been placed in a sealed jar bearing the cow's name.

"*Directions.*

"1. Arrange the scales, milk sheet, sample jars, and sampler in a convenient place behind the cow stalls.

"2. Put at least one preservative tablet in each jar intended for a composite sample. Be sure to place the remaining tablets where children cannot get them, as they are poisonous.

"3. Weigh the milk from each cow separately and record the amount on the record sheet.

"4. Use a reliable sampler, or if one is not at hand use care in mixing the milk by pouring from pail to pail before taking out a sample with a small dipper. This is important.

"5. Keep the bottles where the children cannot get at them, as the preservative is poisonous.

"COMPUTING THE MONTHLY YIELD FOR A COW

"After summing up the weights of milk from one cow for the three days of the month you have the total pounds of milk for an average three days. Divide the sum by 3 and you have the average for one day, which multiplied by the number of days in the month will give the monthly yield. It is not expected, nor is it essential, that these records be accurate to a pound in ordinary dairy herds. When the milk is tested with the Babcock machine the result is read as per cent. of butter fat,—as 3.7 per cent. or 4.3 per cent. This indicates that there are 3.7 pounds or 4.3 pounds of butter fat in 100 pounds of milk. Multiplying the weight of the cow's milk for the month by the test the result indicates the pounds of butter fat which the cow has produced for the month. At the end of the year

it is a simple matter to add together the twelve monthly records of butter fat. Multiply the sum of these weights by the price per pound and the result indicates the value of the product. The record for each member of the herd can be thus worked out. A study of these records shows the comparative value of the various cows in the herd.

"In order to know whether the cow is paying a profit or not the owner must have a definite idea of how much feed she has consumed in making this product. Knowing this, the actual values of all the cows are easily determined. On dairy farms where the hand separator is used it is safe to charge a cow for food only while in milk. The skim milk will usually pay for the cow's board while dry, and the calf and manure should more than pay for the labor it takes to care for her. Why not milk fewer cows and make more money?"

Cost of Crops

The principles laid down in respect to the cost of animal products hold true also for the cost of farm crops. Two methods suggest themselves: Accounts with the various crops and accounts with the different fields. Either method requires detailed records of the labor, seed, fertilizer, etc., expended on the crop and of returns not only for cash sales, but for products used by the household and for feed. On page 97 is illustrated an account with the wheat crop in 1908.

Pearl (Dairy Cow)

1908								
Apr	1	Market value a year ago		50	Apr	1	Value of one Milk produced	45
		Feed for the year		42 30			Calf	67 50
		Care		4				5 -
		Shearing		50				
		Doctor		2				
		Interest on 50. 7%		3 50				
		Incidental		2				
		Net Gain		13 20				
				117 50				117 50

Wheat 20 A. 5 th Crop

1908								
Apr	1	Value of Land at year ago		1100	Apr	1	Value of Land & one Crop 2 % for one cropping	1078
		Interest 7%		77			418 bu Wheat	
		Labor & Twine		63			@ 75¢	313 50
		Seed 2 bu.		30			Straw	15
		Threshing		29 25				
		Marketing		8				
		Fertilizer						
		Net Gain		98 25				
				1406 50				1406 50

CHAPTER VII

SPECIAL COST RECORDS

There are several convenient special records which ought to be adopted besides those I have illustrated. It is not necessary that expensive printed books be provided. A plain sheet of paper may be ruled with little trouble and pasted in the Bill File. In fact, this is in many respects preferable to printed forms, because the forms can then be changed from year to year to suit conditions. I illustrate only the following:—

Labor Records

The best form of a labor record is illustrated on pages 102 and 104. In one, account is kept with the object upon which labor is expended; in the other, with the laborer. For ordinary purposes, page 102 is the most convenient, but where several men are engaged on a project Form (*a*), page 104, is preferable.

Milk Records

Two milk records are illustrated on pages 102 and 104. Each possesses certain advantages over the other. The weekly record need not be so large and admits of larger spaces, while the monthly record exhibits the entire month's result on a single page. The weekly record is more appropriate for filing, being less liable to soiling. Whichever form is used, it should be tacked to a board in a convenient place for the milker. A spring scale, graduated to hundredths, should be hung near the record, far enough from the wall for the pail to hang freely. (See illustration, page 95.) The original records should be filed for at least a year. If a daily time book is kept, it may also be adapted for the milk and poultry records.

Poultry Records

Practically the same form as the milk record can be used conveniently for the egg record, and it is not deemed necessary to enlarge further on the subject.

The methods of improving the poultry stock, and other useful information regarding the poultry business, are found in numerous books and bulletins on the subject.

Duplicating Sales Book

It is often convenient to retain a duplicate of sales, orders, receipts, etc. It will be found very helpful to the farmer and to the dealer alike, if the farmer prepares a bill of the produce he brings into town for sale. This will often avoid misunderstanding, and may save money. This is especially true if the produce is sent in by children or by some one not connected with the family. On page 104 is illustrated a very convenient book which is kept in stock in most stationery stores. Where this system is used, it is advisable that *every* sale be recorded, and then listed as shown on page 103. In entering in the Cash Book, the sale number should be inserted. All sales to merchants should be considered as cash, even if the produce is exchanged for merchandise. If sales are made on time, note the fact on the bill, and enter it into the personal account, as illustrated on page 22.

The Farm Plot

There is one more record which I cannot urge too strongly. I refer to the yearly plots. This record will prove to be one of the most valuable and interesting parts of the farm history. A plot is easily made by first drawing a square on a blank piece of paper and then sketching the fields. It is, of course, unnecessary to draw this to scale. A close approximation is all that is necessary. (See the illustration, page 105.)

A Practical Work Report

The excellent work report shown on page 101 is used on the Beachview Farm, operated by Griffiths & Sons of Seattle. I quote from their letter on the subject:—

"Our trouble has been to arrive at some satisfactory method of obtaining the cost of production of the various crops and kinds of stock. We are attempting to solve this in two ways:—

"First, as to labor, by the weekly work report which the

foreman is instructed to fill out, one for each man on the place, by quarters of a day. The bookkeeper can then apportion the operating expenses, including labor, to the various accounts.

"Second, we have found it more difficult to apportion the produce raised on the farm to the various stock accounts. This can be done without much difficulty with the grain, but with the hay, for instance, when cattle and horses are fed in the same barn, from the same loft, but by different men, it is a difficult matter to charge the various stock departments with the amount used to even an approximation of correctness." (See page 101.)

Office Methods

Talk about office methods on the farm! Why not? Why should not the average farmer enjoy at least a comfortable desk and neatly printed stationery? Every boy loves "to do business." Surround him with a business atmosphere on the homestead and he will stay by you and succeed you in your old age; continue in your slipshod methods and he will move to town and become a cheap clerk instead of a landed proprietor. Encourage your children to assist in your business; make them feel that they are intimately associated with you. Take them into your confidence and, as they grow older, into your counsel, especially when you are considering your annual balance sheet, and a greater prosperity, wider influence, and a more contented family will be your reward.

BEACHVIEW FARM.

Work Report, Week Ending April 16, 1910.

Name Henry Johnson Wages 1.50 & bd. No. 36

Account	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.	Total	Remarks
Crops, Roots	1x						1	Cultivating
Crops, Grain	2	3x			2		7	"
Crops, Hay			4x				4	Hauling
Cattle	1						1	
Hogs								
Horses		1					1	
Poultry					1		1	
Grinding Feed					1		1	
Manure				2			2	
Land Clearing								
Ditching								
Fences, New						4	4	
Fences, Rep.								
Repairs to Bldg.				2			2	
Wood								
Hauling to town								
Harvesting								
Filling Silo								
Haying								
	Total					4	24	
x Quarters of a day							6 days	

WORK REPORT

MILK RECORD

Week ending June 5 1909

Test	NAMES	Sunday Mor	Sunday Ev.	Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Total
4.5	Kate	12	10	12	11	10	13	11	13	12	11	11	12	12	12	162
5.0	Anthia	13	13	13	14	12	13	12	13	14	13	14	12	13	11	190
7.0	Dorset	7	8	8	7	8	9	8	8	10	8	10	8	9	9	117
4.8	Lady	11	12	10	11	10	12	10	11	11	10	12	11	11	11	153
4.7	Beauty	11	11	11	10	11	13	14	12	12	11	12	12	13	11	164
4.4	Glenco	12	13	11	12	11	12	10	12	10	11	11	11	12	10	158

(a) Feed Record, Dairy Cows; June, 1909

Weight	Name or No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total	Value	Remarks
800	Kate Hay (a) Grain (b) Soil	4 10																															115 1920	4 12	Dry alfalfa
975	Anthia	8 16																															224 2420	6 38	
1460	Didget	6 12																															175 2840	6 18	
1120	Lady	8 95																															230 2630	6 12	
830	Beauty	4 28																															118 2040	4 32	
1440	Glenco	6 110																															180 3020	4 77	

(a) pounds, 1930.00 per Ton; (b) pounds, 182.50 per Ton

(b) Daily Labor Record, June, 1909

Account	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Hrs	Rate	Amt	Remarks
Corn							9	9	9	9																						36	30	10 80	Man + Team
Live Stock																			4										8			12	30	3 60	"
Orchard			3											2									1									6	15	90	
Improvements							4					4						3						2								13	15	1 95	
Machinery + Implts	1			2									1								3											7	15	1 05	

SPECIAL RECORDS

FEED RECORD

Kind of Stock Dairy Cows Week ending June 5, 1909

Live Weight	NAME OR NUMBER	SUNDAY Hay	SUNDAY Grain	SUNDAY Soil	MONDAY Hay	MONDAY Grain	MONDAY Soil	TUESDAY Hay	TUESDAY Grain	TUESDAY Soil	WEDNESDAY Hay	WEDNESDAY Grain	WEDNESDAY Soil	THURSDAY Hay	THURSDAY Grain	THURSDAY Soil	FRIDAY Hay	FRIDAY Grain	FRIDAY Soil	SATURDAY Hay	SATURDAY Grain	SATURDAY Soil	Total Hay	Total Grain	Total Soil
800	Kate		4	6#	4	6 3		3½	6 3		4	6 5		4½	6 4		3½	6 2		4	6 4		27½	44 5	

Stock Record, Harris' Farm

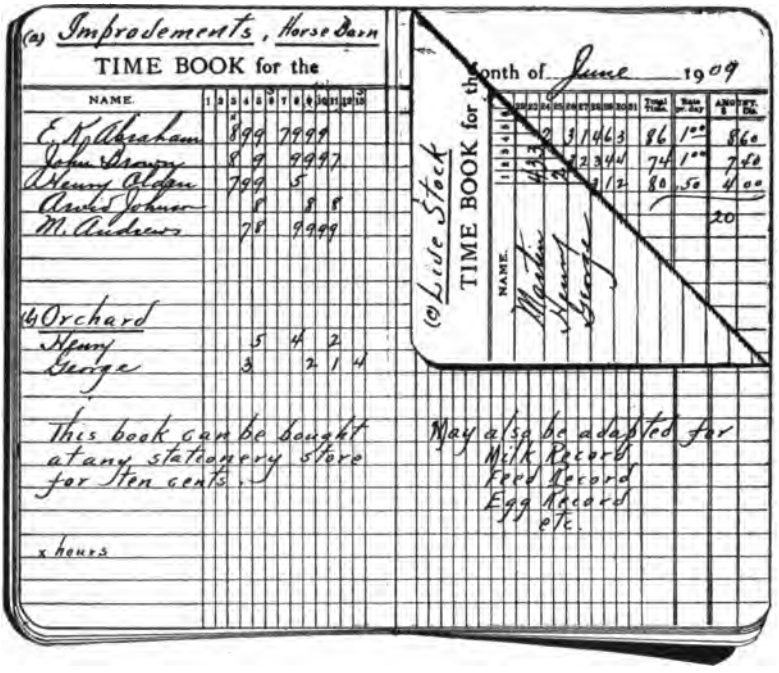
No.	Animal	Breed Name	Birth		Mark Color	How disp'd of	Buyer	Date		Weight	Price	
35	Cow	Jersey Fannie	1900 Feb	11		Sold	J. P. Smith	1907 Aug	5	1000	80	
36	Steer	S. H.	May	8	Red	"	John Winkle	Sep.	8	1150	60	
37	Horse	Maud			Bay	Dies						
1	2	3	4		5	6	7	8		9	10	

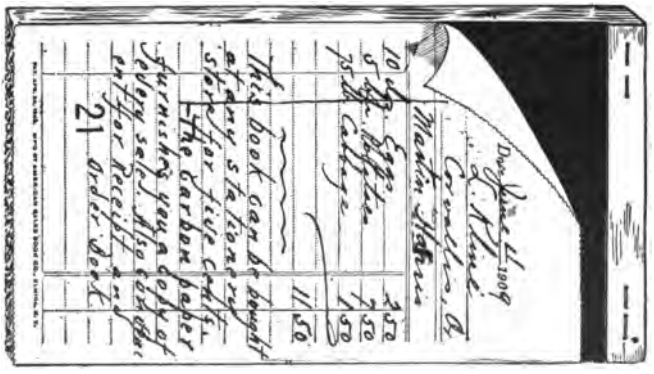
Breeding Record, 1909

No.	Animal: Horse 11½ mo.	Animal: Cow 9½ mo.	Animal: Hog 4 mo.	Date: Bred	Date: Due	Date: Drop'd	Sire	Fee	Owner	Remarks
1	Maud			4 15	4 1	4 5	Prince	15⁰⁰	Hopkins	Normal
2		Loretta		1 5	10 20	10 23	Paul	7⁰⁰	Smith	Small
3			No. 5	12 20	4 20	4 17	Red	—	Self	5 Med.
1	2			3			4	5	6	7

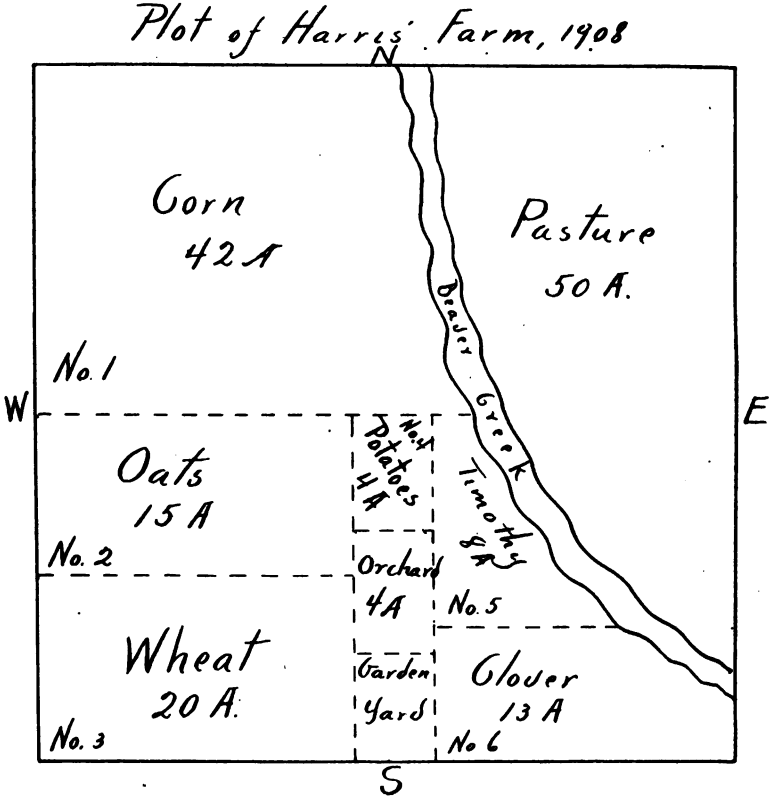
Sales Record, 1909.

Date	No.	To whom	Articles	Paid	Charge	Page
Nov 4	14	Johnson Bros	12 Dz Eggs 24¢; 5 lb Butter 13¢	3 65		
7	15	Kahn El. Co	340 lbs. Corn	170		
10	16	Avery Hotel	25 bu. Potatoes	12 50		
25	17	J. P. Smith	5 bu. Potatoes		2 50	
27	18	Chicago Market	5 Steers 5462 lbs	191 70		
1	2	3	4	5	6	7





TIME AND SALES BOOK



THE FARM PLOT

Illustrative Lessons

LESSON 22

MILK RECORD

I. *General Instructions.*

The milk record illustrated on page 102, Form 10, is kept for the purpose of ascertaining the profitable and unprofitable cows. As explained on page 94, it need not be a continuous record, but should be kept for a week or a month whenever the information is desired. It is very important, however, that this "weeding-out" process be performed regularly once a year. The success or failure of the dairy farmer is likely to depend, to a very large extent, on this practice. Let us take for illustration a herd of fifteen cows. Form 10 is tacked to a board and hung in a convenient place in the barn. A spring balance, graduated to tenths of pounds, is suspended near the record, as illustrated on page 95.

II. *Written Work.*

Following is the record of a mixed herd for the week ending June 5, 1909, representing an actual Oregon herd. The figures in the first column under each day represent the morning milking; those in the second, the evening. Record the following data on Form 10:—

	Sun.	Mon.	Tues.	Wed.	Thur.	Fri.	Sat.	Test.
Kate,	12-10	12-11	10-13	11-13	12-11	11-12	12-12	4.5
Anthia,	13-13	13-14	12-13	12-13	14-13	14-12	13-11	5.0
Digit,	7- 8	8- 7	8- 9	8- 8	10- 8	10- 8	9- 9	7.0
Lady,	12-11	10-11	10-12	10-11	11-10	12-11	11-11	4.8
Beauty,	11-11	11-10	11-13	14-12	12-11	12-12	13-11	4.7
Glenco,	12-13	11-12	11-12	10-12	10-11	11-11	12-10	4.4
Pet,	12-10	11-10	13-12	12-11	11-12	13-12	12-11	5.1
Bess,	10-11	11-11	10-12	11-10	11-12	11-10	11-12	4.6
Cynthia,	12-13	11-12	12-11	12-12	11-12	13-12	11-11	4.9
May,	9-10	10-10	10- 9	9- 9	9-11	11-10	10- 9	5.4
Gertie,	10-11	10- 9	10-12	10-10	9-10	11-12	11-10	5.8
Alta,	12-12	13-14	13-12	14-13	13-13	12-13	13-14	4.7
Ruby,	8- 9	7- 9	8- 9	7- 8	8- 8	9- 9	9-10	6.2
Pauline,	14-15	14-14	14-13	14-15	15-15	14-15	15-15	4.3
Princess,	16-17	16-16	17-18	17-17	16-17	16-18	17-17	4.4

Find from the record:—

1. The total weight of milk.
2. The total weight of butter fat.
3. The weekly income from each cow, assuming that butter fat is worth 31c. per lb. and skimmed milk 25c. per cwt., allowing 10 per cent. for loss of weight in skimmed milk.
4. The gain per cow based on the feeding record, Lesson 23, Form 9.
5. How can the result in (3) be proved correct?

LESSON 23

FEED RECORD

I. *General Instructions.*

The feeding record, page 102, Form 9, is a companion to the milk record, Lesson 22. One is not kept without the other. Both are kept for the purpose of checking up the profits of the dairy cows. Three methods are fully discussed on pages 92 and 93. This and the preceding lessons have reference to the third method. Suppose that Form 9 is tacked to a board and hung in a convenient place in the dairy barn. Below is the feed record of the herd in the last lesson.

II. *Written Work.*

Enter the following results in the respective columns. Only the last six cows were fed hay.

Kate, weight, 800 lbs.; Sunday, grain, 4 lbs.; soiling, 64 lbs.; Monday, 4-63; Tuesday, 3½-63; Wednesday, 4-65; Thursday, 4½-64; Friday, 3½-62; Saturday, 4-64.

Anthia, 975 lbs.; 8-80, 8-80, 8-80, 8-80, 7-80, 7-82, 7-81.

Digit, 1,460 lbs.; 6-92 daily.

Lady, 1,120 lbs.; 8-90 daily.

Beauty, 830 lbs.; 4-68 daily.

Glenco, 1,440 lbs.; 6-100, 6-110, 6-110, 6-100, 6-100, 6-100, 6-110.

Pet, 950 lbs.; 7-80 Sunday, Monday, Tuesday; 7-83 Wednesday, Thursday, Friday, Saturday.

Bess, 1,000 lbs.; 6-86 daily.

Cynthia, 1,270 lbs.; 8-100 daily.
May, 850 lbs.; 5-65 Sunday, Monday, Tuesday, Wednesday; 4-60 Thursday, Friday, Saturday.
Gertie, 900 lbs.; 6-70 daily.
Alta, 1,375 lbs.; 8-100 daily.
Ruby, 1,050 lbs.; 24 lbs. hay, 4½ grain, 42 soiling; 25-4-43, 23-5-45, 24-4½-44, 25-4-43, 25-4½-45, 23-5-43.
Pauline, 1,300 lbs.; 27-6-45 daily.
Princess, 1,350 lbs.; 30-7-48 daily.

Find from the record:—

1. The total feed per cow and enter the result in the proper column.
2. The weekly cost per cow when the grain mixture is worth 95c. per cwt., soiling $1.05 per ton, and hay $10.50 per ton.
3. What changes should be made in the herd?

LESSON 24

LABOR RECORD

I. *General Instructions.*

As explained on page 98, a labor record may be prepared monthly or weekly. The monthly form, illustrated on page 102, has many advantages. In the first column may be listed either the various accounts to which the labor is to be charged, as in this exercise, or a sheet may be devoted to each account and the names of the laborers listed in the first column. The latter plan is preferable in large enterprises. Sundays fall on May 6, 13, 20, and 27. Mark "S." above those dates and avoid placing any figures in the Sunday columns.

II. *Written Work.*

1. On Form 6 prepare the following pay roll for the month of May, 1910, as illustrated on page 102:—

Labor on Corn, Man and Team, May 7, 8, 9, and 10, 9 hrs. each @ 30c. per hour.

Live Stock, Man and Team, 18, 4 hrs.; 28, 8 hrs. @ 30c. per hour.

Orchard, 3, 3 hrs.; 14, 2 hrs.; 23, 1 hr. @ 15c. per hour.

Improvements, 7, 4 hrs.; 12, 4 hrs.; 19, 3 hrs.; 25, 2 hrs. @ 15c. per hour.

Machinery and Implements, 1, 1 hr.; 5, 2 hrs.; 15, 1 hr.; 22, 3 hrs. @ 15c. per hour.

Wheat, 4 and 5, 9 hrs. each; 16 and 17, 9 hrs. each, Man and Team, @ 30c. per hour.

Onions, 1 and 2, 9 hrs. each; 11, 6 hrs. @ 15c. per hour.

Potatoes, 21, 9 hrs.; 24, 6 hrs.; 25, 5 hrs., Man and Team, @ 30c. per hour.

Hay, 11, 3 hrs.; 14, 6 hrs.; 15, 4 hrs.; 18, 3 hrs., Man and Team, @ 30c. per hour.

Oats, 26, 29, and 30, 9 hrs. each; 31, 7 hrs., Man and Team, @ 30c. per hour.

2. Add the number of hours under each account and enter in the hour columns.

3. Find the amount under each account, and, finally, the total labor.

LESSON 25

THE FARM PLOT

Read the suggestions regarding the farm plot on page 99. On Form 11 draw to scale any farm with which you are acquainted, preferably your own farm, if you own one. Lay out the various fields and mark the crop and the acreage, as shown on page 105. Draw it first in lead pencil, then in ink.

Supplementary Exercises (Optional)

1. THE INVESTMENT

The census for 1900 gives the following apportionment for land and improvements, buildings, implements, machinery, and live stock for every $10,000.00 invested:—

Division.	Total.	Land and Impr.	Buildings.	Imp. and Mach.	Live Stk.
N. Atlantic States..	$10,000	$5,737	$2,567	$606	$1,090
S. Atlantic States..	10,000	6,661	2,720	332	1,362
N. Central States...	10,000	6,055	825	500	2,620
S. Central States...	10,000	4,114	1,114	373	4,356
Western States	10,000	4,463	693	593	4,251
Total	$50,000	$27,030	$7,919	$2,404	$13,679
Average	$10,000	$5,406	$1,584	$481	$2,736

Compare the above with two or more typical farms with which you are acquainted.

2. PRIVATE ACCOUNTS

The student will find it a valuable exercise to keep account of his personal receipts and expenditures on a form similar to No. 2. The columns may be headed as follows: Receipts—Earnings, From Home; Payments—Fees (Books and Stationery), Board, Room, Clothing, Recreation. A semester's record of the student's actual expenses will be given special credit. Whether submitted for credit or not, all students are urged to keep an accurate record of their personal expenses.

3. AGRICULTURAL STATISTICS

It is desired to obtain accurate data on farm management, and you are required to write to two or more farmer friends for certain information. Copies of a letter will be furnished by your teacher. (A copy of the proposed letter will be furnished any teacher by the author.) Tabulate the result and prepare a report to be discussed by the class.

4. COST RECORDS OF CROPS

As illustrated on page 97, prepare a cost record, showing the net profit or loss of two crops, from information secured from reliable sources. Any local crop may be taken, such as potatoes, wheat, oats, hay, etc. Two months will be allowed for the work.

Hand in your work with a letter of explanation of the system.

5. COST RECORDS OF STOCK

According to either the second or third method outlined on page 92, prepare a statement of the net profit or loss of not less than five milch cows. Your information may be drawn from any farm, from the college department of dairying, or from agricultural bulletins. The records required are: Labor, milk, feed record, and the individual Ledger account of each animal. Two months will be allowed for this work. Use Forms 1, 6, 9, and 10.

Hand in your work with a letter of explanation of the system.

PART III

BUSINESS ORGANIZATIONS, CORRESPONDENCE, AND FORMS

BUSINESS ORGANIZATIONS, CORRESPONDENCE, AND FORMS

CHAPTER VIII

BUSINESS ORGANIZATIONS

The tendency of to-day in all important business enterprises is toward organization and coöperation. What would be impossible for an individual to accomplish becomes a comparatively easy task when the resources of a number of persons are combined. While no business organization should be effected without the assistance of competent legal counsel, it is important that the parties should understand the nature of the organization and the necessary steps required for their promotion and the form of contracts in common use. This is all that will be attempted in this chapter. The legal aspects of each organization must be studied under commercial law. The most important among business organizations are Partnerships, Joint Stock Companies, and Corporations.

Partnership

Two or more individuals competent to make contracts under the law may combine their labor and capital in any lawful business enterprise. When this is done without any legal formality it is called a partnership. The agreement is called the Articles of Copartnership and should always be in writing and prepared by a competent attorney. Any name may be adopted which cannot be shown to cause an injury to another's business. Each partner is personally liable for all the debts of the partnership unless it is clearly held out before the public that another agreement exists between the partners. This liability extends to the personal property of each partner as well as to the partnership assets,—one of the subjects most often misunderstood by the layman. Nor does the liability

depend on the amount invested or the service rendered by each partner. So long as the business is solvent, the profits or losses are divided according to the articles of copartnership, but if the business fails and only one partner is able to pay, he is responsible for all the debts of the firm.

Following is a standard form of articles of copartnership:—

Articles of Copartnership

THIS AGREEMENT WITNESSETH, That John Doe of Auburn, Illinois, and Edward Harvey of Auburn, Illinois, have this day agreed to associate themselves together as a copartnership, for the purpose of engaging in the business of buying and selling for profit Feed and Produce, at Auburn, Sangamon County, Illinois, under the firm name of Doe and Harvey, the term of said copartnership to continue five years from and after the first day of June, 1910, unless sooner dissolved.

The investment contributed by the aforesaid partners is to be as herein set forth, to wit: John Doe contributes $3,000.00 in cash, and Edward Harvey contributes $3,000.00 in cash.

The profits or losses of said partnership business are to be shared equally.

With respect to the time and services given, and the compensation to be received, it is agreed that both parties shall give their entire time to the business. John Doe shall be allowed a salary of One Hundred Dollars ($100.00) per month, and Edward Harvey Eighty Dollars ($80.00) per month, unless otherwise agreed between the parties.

It is also agreed that aside from the profits and compensations heretofore mentioned, neither partner is to withdraw from the business any money or other property, except with the written consent of the partners.

It is especially agreed that neither of the parties to this contract shall sign or indorse any bank note, draft, or commercial paper, nor sign any official or other bond, nor do any other act to create a financial liability or obligation, without the written consent of his copartner.

At the expiration or sooner determination of said copartnership, the business and property of said firm may be closed out by sale; and, after all debts and liabilities are paid and dis-

charged, the amount remaining shall be divided between the partners in the ratio of their respective interests; or, if the parties so agree, the copartnership may be continued for such further time, and upon such terms, as the members thereof may be able to agree upon.

Witness our hands this first day of June, 1910.

Witness: { F. W. BROWN, E. R. JOHNSON, } JOHN DOE, EDWARD HARVEY.

EXERCISE 1

Write articles of copartnership for any firm with which you may be acquainted, using the articles on page 116 as a model.

Joint Stock Companies

A joint stock company differs from a partnership in its organization and membership only, not in the liability of the members. Its organization is like the corporation; the liability of its members and its formation are like the partnership. No legal steps are necessary to form a stock company. The capital is usually divided into shares like the corporation, and, in voting, a member of a stock company has but one vote regardless of his interest in the business, while in the corporation the voting power depends on the amount of stock held. The stock company has power of succession, but has no seal. A suit must be conducted in the name of all the stockholders and not in the name of the company through its officers. The advantages of a stock company over a corporation are: (1) less formality in organization; (2) less publicity; (3) not affected by the corporation tax; (4) no public reports required.

EXERCISE 2

Write a paragraph pointing out how the Hood River Apple Growers' Union could be changed into a joint stock company. (See Articles on page 119.)

Corporations

Because of its adaptability to a large variety of conditions, the corporation has become the favorite form of business organizations. Many corporations have stockholders in all

parts of the world, but the organization is represented in its sphere of business and before the law by its officers and directors. Thus a corporation may be defined as an artificial person, created by law, either under special enactment or under general statute, to act as one person, through its officers, in its business capacity and before the law.

The formation of a corporation should be thoroughly understood by every citizen, but it is extremely inadvisable to organize without the assistance of a competent attorney. It is not safe to lay down many general rules governing the organization of corporations, since the laws differ materially in the several states. Reliable information can be obtained free of cost from the Secretary of State in each state of the Union.

The corporation differs from the partnership in several important respects. (1) It is created by law; that is, no corporation is recognized before the law unless it is organized exactly as set forth in the statutes of the various states. (2) The liability of the stockholder extends only to the amount of his stock, unless otherwise provided in the articles of association. (3) A corporation can sue and be sued in its own name through properly qualified officers. (4) It has the power of succession; that is, the organization is not affected by the death or disability of any stockholder. (5) The interest of a stockholder may be transferred without affecting the organization. (6) The voting power of each stockholder is proportional to the amount of his stock.

From a careful study of the constitution and by-laws given below, it will be seen that the articles of association must set forth (1) the intention of forming a corporation; (2) the corporate name; (3) the purpose of the organization; (4) the place of business; (5) election of officers; (6) powers and duties of officers; (7) amount and division of stock, etc.

The advantages of the corporate organization are many and important. By it the coöperative spirit is fostered; in union is strength. The small means of a large number are collected and effective capital is secured for large enterprises; members may enter or withdraw without disturbing the organization; through organization, special talents are utilized to best advantage; waste of material, labor, and capital are reduced to

a minimum; the publicity required by law has a wholesome influence against corruption and dishonesty.

It is not out of place to give a word of caution to the uninitiated in the subject. Schemers often promote corporations for fraudulent purposes and hide their own designs behind innocent stockholders. Do not rush into incorporating; a majority of the corporations formed are failures. If you wish control of the corporation, you should control at least fifty-one per cent. of the capital stock.

Every stockholder should be provided with a copy of the constitution and by-laws and also with the annual report. See to it that the minutes of the board of directors and all books of account are carefully kept. Every stockholder has the right to inquire into the business methods of the corporation.

The legal aspects of stock issue, kind of stock, dividends, surplus, etc., are subjects for commercial law.

The constitution and by-laws of the Hood River Fruit Growers' Union is given below as a model:—

Constitution and By-Laws of the Hood River Apple Growers' Union

ARTICLE I

The name, place of business, capital stock, and purposes of this corporation are set forth in the articles of incorporation, which are referred to as part of these by-laws.

ARTICLE II

The membership of this corporation shall be confined to actual growers of fruit of Hood River Valley and vicinity.

ARTICLE III

The board of directors shall consist of nine members, four of whom shall hold office for more than one year. They shall be elected annually and shall serve until their successors are elected and qualified. They shall qualify as directors within ten days after their election, and within ten days thereafter they shall elect from their number a president, vice-president, and secretary. They shall also choose a treasurer, who shall be required to give bonds, with surety in such sums as they

may deem ample. They may choose a bank as treasurer without bonds. The annual meeting shall be held on the first Saturday in April in each year.

ARTICLE IV

The directors shall have the power to levy and collect assessments on the capital stock not to exceed fifty per centum of the stock subscribed at any one time and not oftener than every sixty days, the same to become delinquent in thirty days from date of notice of such assessment in the local newspaper. The directors shall sell shares of stock to actual fruit growers only.

ARTICLE V

The directors shall employ such agents or other employees as are necessary to do the business of the corporation, and shall fix their remuneration; provided, that the board of directors shall receive no salary for acting as directors. They shall have daily account sales rendered to the members of the union each day, as received by them or their agent, giving a statement by whom sold, gross sales, commission, freight, or express, and amount due members of the union; also giving condition of fruit, if there be any complaint.

ARTICLE VI

The directors may refuse to receive for shipment, under the brand of the union, any package of fruit not considered prime from any cause. They shall refuse to receive for shipment fruit from any person not holding stock.

ARTICLE VII

This organization through its board of directors shall have the exclusive and unqualified power to market all apples grown by any of its members. A contract between each member and the board will be required.

ARTICLE VIII

The duties of the secretary shall be to keep a record of the proceedings of the meetings of the stockholders and directors. He shall keep the corporate seal of the association and shall

be custodian of all deeds, articles of agreement, and other valuable instruments of writing belonging to the association. He shall keep all books of the issuance and transfer of stock and shall countersign all certificates of stock and affix the seal of the board of directors and stockholders, and shall keep, or cause to be kept, all books of account necessary to the transaction of the general business of the association. The manager of the union shall be placed on a flat salary.

ARTICLE IX

The board of directors shall provide the necessary means for carrying out the purposes for which the association is formed by reasonable charges and commissions for the service rendered by the association to its members and customers.

ARTICLE X

The duties of the treasurer shall be to receive all moneys due or paid to the association and deposit the same as the directors may instruct; to pay out said funds upon the written order or check of the president, first vice-president, or general manager, when countersigned by the secretary.

ARTICLE XI

All notes or other evidence of indebtedness of the association shall be signed by the president and countersigned by the secretary of the board of directors.

ARTICLE XII

The president shall instruct the secretary to call a meeting of the stockholders whenever in his judgment the necessities of the union require it, by giving one week's notice through the local newspaper and send each a notice on a postal card.

ARTICLE XIII

No union label shall be placed on a box of fruit except by the manager of the warehouse just before shipping.

ARTICLE XIV

Each packer will be held responsible for his own work by a

system of fines. No fruit will be received unless put up by a packer employed by the union.

ARTICLE XV

The union will have no packing house foremen except those employed by the union.

ARTICLE XVI

A majority of the stock subscribed, upon which all legal calls or assessments have been paid in full, shall constitute a quorum at any stockholders' meeting, and no vote shall be counted which is not represented by one share of the stock upon which all calls or assessments have been paid.

ARTICLE XVII

These by-laws may be amended by vote of the majority of the stock upon which all calls or assessments have been paid, at any regular or called meeting, provided that notice to amend the by-laws shall have been given in the call for a special meeting.

ARTICLE XVIII

Any member desiring to dissolve his connection with this corporation may do so by surrendering his stock to the secretary thereof or by transferring it to any member in good standing on the secretary's books.

EXERCISE 3

Write a letter to your instructor describing in detail how you would organize and incorporate a creamery. Point out the peculiarities of the incorporation laws of your state. (You can secure a copy of these laws free from the Secretary of State.)

CHAPTER IX

THE BUSINESS LETTER

In this age of complex business activity, where a large volume of the business of the country is done by letter, it is essential that the farmer, as well as the merchant, be able to write a correctly-arranged, direct-to-the-point business letter. Therefore, the purpose of this chapter is to set forth in as clear and concise a manner as possible the customary forms and arrangement of business letters.

Business letters include all correspondence relating to the writer's financial, professional, or official dealings with other people, and should clearly set forth the subject matter of which they treat.

In order for a mechanic to do good work he must have suitable material and good tools with which to work. In order for the writer of letters to do good work and create a good impression he should use a good grade of paper and pens, and ink that flows freely.

We judge people largely by their surroundings and the associates they choose. The writer of a letter is judged largely by the general arrangement, wording, and neatness of his letter, and by the quality of stationery used.

The preceding paragraph brings us to another important matter emphasized elsewhere in this text. Every farm, no matter how small, should have a suitable name. In fact, the importance of selecting a name for your farm cannot be overestimated. It not only lends value to your farm and dignity to your community, but it is a source of satisfaction to have neatly-printed stationery bearing the name of your farm, the name of the proprietor, and in some instances a sketch or small photograph indicating the products of the farm. (See models on page 124.) It is well, however, to bear in mind that crowding too much on a letter head detracts from rather than adds to its value. Your post office address, including your box or R. F. D. number, should also appear on

(1)
MAPLE HILL FARM
J. C. FARQUHAR, PROPRIETOR
R. F. D. NO. 1

(2)
STANDISH BROTHERS
FRUIT RANCH
THREE AND ONE-HALF MILES
EAST OF ENTIAT, WASH.
ENTIAT, OREGON, Dec 1 1909

(3)
Midland Farm
M. J. Harper
R. F. D. No. 2
Farmers Phone 1422

(4)
Pleasant Grove Farm,
J. G. HANSON Proprietor.

(5)
+South View Farm+
C. O. SNYDER.

FINE APPLES, PEACHES AND OTHER FRUITS

GENERAL FARMING AND STOCKRAISING

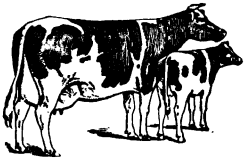
(6)
Anderson's Orchard Home Farm
G. N. ANDERSON
Talent, Oregon, Nov 17 1909

(7)
AUG. PAASCH
FRUIT GROWER

(8)
THE WALNUT HILL FARM
FAY F. DEAN

(9)
SHADOW BROOK FARM
S. H. WALLACE, PROPRIETOR
HOOD RIVER, OREGON
HOLSTEIN CATTLE
"EDGEWORTH" FARM
"LINN BROOK" FARM
LINN BROOK DAIRY CO

(10)
MERRITT GREENE & SON
"EDGEWORTH"
BREEDERS OF PURE BRED WINTER WHEAT, OATS AND CORN



MARSHALLTOWN, IOWA.

MODEL LETTER HEADS

the letter head, correctly arranged, so that in writing the heading of the letter all that is necessary to do is to fill in the date.

Skeleton Letter

Before taking up the discussion of the various parts of a letter, a skeleton letter is presented herewith, with the different parts lettered for the purpose of reference. Study the skeleton form very closely, not only with a view to noting how and where the heading is arranged, the uniformity of the indentations, and the complimentary close and signature, but also notice how balanced the letter appears in the page.

(*a*) .....,
(*b*) .....

(*c*) .....,
(*d*) .....
(*e*) .....:—
(*f*) .....
.....
.....
.....
.....

(*f*) .....
.....
.....
.....
.....
.....

(*f*) .....
.....

(*g*) .....,
(*h*) .....

Key to skeleton letter:—

(*a*) First line of the heading.

(*b*) Second line of the heading.

(*c*) Name and title of the person to whom you are writing.

(*d*) Address of the person to whom you are writing. (In some cases the address should occupy two lines. See model, page 126.)

Incorrect Form.

February 1th 1910
Gentlemen i See the add of the bulletin on farm records. for. two cts in Stamps inclosed plead find two cts in Stamps for which plead send me the bulletin and oblige is

Correct Form.

R. F. D. 5, Blank, Ohio,
Feb. 1, 1910.

Oregon Agricultural College,
Corvallis, Oregon.
Gentlemen:
Enclosed find two cents
in stamps for which please send
Professor Detelli's bulletin on
Farm Records.
Respectfully Yours,
John Doe.

THE FORM

(*e*) Salutation, as Dear Sir, Gentlemen, My dear Mr. Smith, etc.

(*f*) The beginning of the body of the letter. Strictly speaking, the salutation is a part of the first paragraph; however, for the sake of uniformity, it is well to begin the first paragraph of the body of the letter as far to the right of the left-hand margin as succeeding paragraphs. Note that all paragraphs are uniformly indented.

(*g*) Complimentary close, as Yours truly, etc.

(*h*) The writer's signature. Note that the signature begins as far to the right of the complimentary close as the second line of the heading (*b*) begins to the right of the first line (*a*).

The Heading

The heading of a letter includes the address of the writer and the date. It may occupy one, two, or three lines, depending on the length of the address.

The following forms illustrate one, two, and three line headings:—

Form 1

(*a, b*) Corvallis, Oregon, July 15, 1910.
(*c*).....,
(*d*).....
(*e*).....:—
(*f*).....

Form 1 shows a one-line heading begun far enough from the left-hand margin to fill the remaining space to the right. Should it be necessary to begin a heading to the left of the center of the body of the letter, in order to get it on one line, a two-line heading should be used. It is not good form for the heading to extend to the left of the middle of the sheet.

Observe carefully the punctuation of the heading.

Form 2

(*a*) 68 Sixth Street,
(*b*) Portland, Ore., July 5, 1910.
(*c*).....,
(*d*).....
(*e*).....:—
(*f*).....

Form 2 shows a two-line heading, the first line begun at or a little to the right of the middle of the page, and the second line begun as far to the right of the first as the second line of the introductory address (*d*) is begun to the right of the first line of the introductory address (*c*).

Form 3

(*a*) Chehalis, Lewis County, Wash.,
(*b*) July 15, 1910.

(*c*).....,
(*d*).....
(*e*).....:—
(*f*).....

Form 3 shows a two-line heading with the post office address occupying one line and the date the other.

Form 4.

(*a*) Corvallis, Ore., July 12, 1910.
(*b*) R. F. D. No. 2.

(*c*).....,
(*d*).....
(*e*).....:—
(*f*).....

Form 4 shows a two-line heading where it is desired to give the rural route.

Form 4 might also be arranged as follows:—

R. F. D. No. 3,
Corvallis, Oregon,
July 25, 1912.

The models on page 126 illustrate incorrect and correct forms of a business letter. Note the arrangement of the heading, lines one and two. The R. F. D. or box number or street number should always be written in connection with the heading. Also note that line three has been skipped. This is done for the purpose of lending balance to the letter head.

Punctuation

The heading of a letter may be separated into distinct parts for the purpose of punctuation. A comma should follow each

part of the address except the last, which should be followed by a period, as shown in the models.

EXERCISE 4

Write, punctuate, capitalize, and correctly arrange the following headings:—

1. Albany Oregon March 29 1888
2. Vancouver Washington may 3 1912
3. bloomington indiana 821 Fifth street october 1 1910
4. 321 seventh Street peoria illinois May 4, 1911.
5. 1907 Oregon agricultural College Sept 25 corvallis Oregon
6. Write headings for four or more places with which you are familiar.

Introductory Address and Salutation

The introductory address of a letter is made up of two parts, (*c*) consisting of the full name and title of the person addressed, (*d*) consisting of his street number, P. O. box, and post office address, or such other information as the person to whom you are writing may designate.

The salutation is the term Dear Sir, Dear Madam, Gentlemen, etc., and should begin on a line with the body of the letter, that is, flush with the left-hand margin.

Custom as well as courtesy requires that some title be used with the name. Individual titles generally used are Miss, Mrs., Mr., Dr., Rev., Esq., Prof., and Hon., depending on the rank or profession of the person addressed. When a partnership or corporation requires a title, Messrs. may be used. A title should not be used if the name of the firm begins with "the." Only one title should be used, and it should be placed before or after the name, as Mr. John H. Brown, or John H. Brown, Esq., not Mr. John H. Brown, Esq.

Models

The following are good models showing the heading, introductory address, salutation, and complimentary close, the body of the letter being omitted. The line after the complimentary close indicates the position of the signature.

Form 1

Aurora, Ill., March 10, 1912.

Montgomery, Ward & Co.,
Chicago, Illinois.

Gentlemen:—

Yours truly,

.....

Form 2

67 Wabash Avenue,
Chicago, June 24, 1910.

Mr. A. P. Robinson,
211 Globe Block,
Seattle, Washington.

Dear Mr. Robinson:—

Sincerely yours,

.....

Form 3

Michigan University,
Ann Arbor, Michigan,
June 14, 1911.

Dear Frank:—

Sincerely,

.....

To Mr. Frank Huntington,
Beloit, Wisconsin.

Form 4

The Ideal Farm,
McMinnville, Oregon,
October 12, 1914.

Mr. Silas Blank,
212 Second Ave.,
Portland, Oregon.

Dear Sir:—

Yours truly,

.....

Punctuation

Carefully observe the arrangement and punctuation of the models. Notice that each part of the introductory address is

followed by a comma, except the last, which is followed by a period. The salutation should be followed by a colon and the complimentary close by a comma. The writer's signature should be followed by a period.

Capitalization

Every sentence should begin with a capital letter, and every important word of the address should be capitalized; also observe that all titles are capitalized and that the first and last word and every noun in the salutation should begin with a capital.

EXERCISE 5

Write the following headings and introductory addresses, arranging and punctuating them according to the models given:—

1. Wise Virginia June 15, 1910 Mr. F. B, Goshen Clintwood Virginia Dear Sir
2. Berkeley Calif April 11 1910 Mrs. James P. Hadley Eugene Oregon Dear Madam
3. Raymond Washington 821 Fourteenth street July 18 1909 Mr. T B Stidham 321 Railroad Ave Doty Wash
4. 821 Second Avenue Seattle Washing May 4 1910 John P Randolph Esq 741 I street Tacoma Washington
5. Ames Iowa, Dec 23 1908 The Pure Food Grocery Co City gentlemen
6. Kalispell Mont Nov 8 1911 The Home Lumber Co Fargo N Dak gentlemen

The Body of the Letter

The mechanical arrangement of the heading, introductory address, salutation, body of the letter, and complimentary close can be mastered in a short time by any one who is careful and painstaking. However, the composing of the letter proper is an entirely different matter, and by far the most difficult part of letter writing, and a good style can be acquired only by careful and painstaking effort.

It is not the purpose of this chapter to give you certain forms of letters, worded in a specific way, for the various subjects about which it may be necessary for you to write. But it is rather its purpose to give you suggestions which will

be of assistance to you in the writing of your business letters, and that will enable you to put into your letters your own originality in a clear, forceful, convincing manner.

Some reference should always be made to the letter which is being answered, but in order to secure the best effect this reference should be made incidentally. Such opening phrases as "Your esteemed letter of the 10th inst. is received and in reply would say" are overworked and should be avoided. They are used by those who have fallen into a rut, or by those who lack originality. It would serve your purpose better to open your letter somewhat as follows: "The suggestion contained in your letter of the 15th inst. meets with my entire approval," or some similar opening that would be in conformity with the letter to which you are replying.

It is an inexcusable mistake to fail to date a letter. Without the date a letter is, in many cases, of no value. Especially is this so should it be necessary to bring the letter into court for the verification of some transaction about which the letter may have been written. The heading, including the date, should be written before taking up the body of the letter.

A letter should always contain the complete address of the writer, even though you are corresponding with those who may reasonably be expected to know your address. This precaution often saves time and money, and preserves friendship.

A business letter should be as brief as the nature of the subject about which you are writing will permit. If you are ordering goods by letter, you should clearly set forth the nature of the articles you desire, the way you wish to have them shipped, whether by express or freight, or whether they should be sent by mail. (See model on page 133.) If you are a regular customer of the firm, and have an account with them, you should clearly state the terms on which you desire to make this particular purchase. However, should it be your first order, you should either make sufficient remittance to cover the amount of the order or give some responsible person as reference.

Should you be seeking information by letter, ask for that information in much the same way as though you were talking

to the person. At all times be courteous, but do not try to overdo it. In writing to a person about a subject in which he is not directly interested, you should inclose a self-addressed stamped envelope for his reply.

Remittances and Orders

Remittances in the form of currency should never be sent through the ordinary letter. This is not only unsafe, but the sender has no evidence that the amount in question was sent or that the person to whom it was sent received it. You should choose as the safest and most convenient way of making a remittance one of the following methods: Postal money order, express money order, registered letter, check, or bank draft. Probably the most convenient method to those who live in rural districts would be the postal money order.

In making a remittance, no matter how small the amount, you should state in your letter accompanying the remittance for what it is intended, the exact amount, the nature of the remittance, whether it is a check, money order, or otherwise.

Model Order

Sterling, Illinois, June 15, 1910.

Ginn & Company, Publishers,
2301-2311 Prairie Avenue,
Chicago, Illinois.

Gentlemen:—

I inclose herewith postal money order for $4.72, for which please send me, by prepaid express, the following books:—

The Working Principles of Rhetoric, by John F. Genung, 12mo, cloth, price $1.40;

Lockwood and Emerson's Composition and Rhetoric, 12mo, cloth, price $1.00;

Library of Anglo-Saxon Poetry, Vol. I. Beowulf, 12mo, cloth, price $1.12;

Allen and Greenough's New Latin Grammar, 12mo, half leather, price $1.20.

I should like to have these books reach me not later than the 20th inst., as I expect to use them in my summer school work beginning on the 21st.

Yours truly,

Inclosure. Student & Company.

Where more than one item is ordered in a letter, as in the foregoing model, it is better to write them in a line or column, that is, assigning to each item a separate paragraph, followed with a complete description of the item, including the price, number, size, color, weight, and any other information that would insure your securing just what you wanted.

Taste and Neatness

As suggested elsewhere, the writer should throw his own originality into his letters; but it must be steadily kept in mind that this must not be done in a haphazard, careless manner. One of the purposes of a letter is to get action. In order to do this the writer must, if possible, put himself in the place of the receiver of the letter and, having done this, carefully consider just what it would be necessary for some one else to do or say to get the desired action from himself. It would be quite impossible to lay down definite rules as to just how this should be done, but I am sure all will agree that the letter should be free from misspelled words, ink blotches, grammatical errors, slang, undue criticism, sweaty or dirty finger prints, or any other similar defects that would be unpleasant to the eye.

A business woman writing to a stranger should never neglect to prefix to her signature the title Miss or Mrs. in parenthesis. It is embarrassing to both the writer and the person who receives the letter, should a woman be addressed as Mr. In case a letter is received where it is evident that the writer is a woman, but she has merely signed "Mary Jones," omit the title and address her: "Mary Jones, Cedar Rapids, Iowa, Dear Madam:—"

It is not supposed that those for whom this is intended would have the time to go into the real science of letter writing, as do the great majority of the large manufacturing concerns of the country who conduct extensive advertising campaigns, and for this reason our suggestions cover merely those points it is thought would be of assistance to the majority of those who are pursuing this course.

The letter should be arranged artistically on the page. You should endeavor to arrange the letter so that there will be an

equal blank space at the top and at the bottom of the page. If the letter is short, wider left and right hand margins should be allowed so that the letter will occupy more vertical space, and thus avoid a stringy appearance.

If letter paper is used, size 8½ x 11 inches, the indentations for introductory address and paragraphs should be deeper than when note paper, usually about 8½ x 5½ inches, is used. When letter paper is used, the indentations should be about three fourths inch; when using note paper, the indentations should be about one half inch.

Paging

If more than one page is required for a letter, each page, except the first, should be numbered in the order in which it is written. Before the letter is inclosed in the envelope the pages should be arranged in the order in which they should be read.

The Paragraph

A series of connected sentences treating of a single topic make what is called a paragraph. In letters, as in other forms of composition, the change from the discussion of one topic to another should be indicated by an indented line, which catches the eye of the reader and tells him that another topic is to be considered.

The Postscript

The postscript is an afterthought or a statement added for emphasis after the body of the letter has been finished. The postscript should be indented the same as paragraphs, and should begin on the second line beneath the signature. It should be preceded by "P. S." and followed by the initials of the writer.

Study the arrangement of the following letter:—

Corvallis, Oregon, July 15, 1910.

The Home Real Estate Co.,
Forest Grove, Oregon.

Gentlemen:—

In accordance with our agreement of June 15th, I am sending you attached hereto my personal check, No. 68, on

the First National Bank of Corvallis, for $42.43, to be applied as follows:—

$40.00 in payment of the first monthly installment due on residence lot No. 6, Block E, Wilkinson's addition to the City of Forest Grove, Oregon; $2.42 in payment of the interest on the remaining eleven monthly installments of $40.00 each.

Kindly send me credited coupon for the first installment and interest.

Yours truly,

.....

Inclosure.

EXERCISE 6

1. Make up and write the heading, introductory address, salutation, and complimentary close for five different letters, referring to the models, if necessary, for the correct forms.

2. Write a letter, dated at your home, ordering five different articles of merchandise.

3. You were at your county seat several days ago and ordered your local paper. You have not yet received a copy. Write a courteous letter to the editor requesting him to investigate the delay and to send the paper to your address regularly until notified to discontinue it.

4. In the early part of the harvest season you purchased farm implements of a hardware dealer of your city, amounting to $175.50. It is now nearing the time that you agreed to make the second payment of $75.00. Your grain yield has not been as large as you expected, and, owing to certain other obligations you must meet, you have found it necessary to ask for an extension of time on at least half of the amount. Write him a letter explaining your situation and ask for the extension of time.

5. Your hardware dealer has agreed to accept $40.00 and to grant an extension of thirty days on the balance. Write him a letter thanking him for the extension and inclose your check for $40.00. Call attention to the remittance.

FOLDING THE LETTER.

Paper

There are two sizes of business letter paper, namely, letter size, $8\frac{1}{2} \times 11$ inches, and note size, usually $8\frac{1}{2} \times 5\frac{1}{2}$ inches,

though the size of note paper varies. The larger size is generally used by business houses.

Folding

The following is the correct method of folding letter paper: (1) Turn the lower edge up to within a half or quarter of an inch of the top, then crease the fold, being very careful that the side edges of the paper are exactly even. The reason for not allowing the bottom and top edges of the paper to be even is to make the unfolding of the letter easier, and without loss of time. (2) With the creased edge of the letter toward you, fold over the right edge a little less than one third, being careful to keep the creased edges of the first and second folds even. (3) Fold over the left edge a little less than one third, overlapping the second fold. The second and third folds should be of equal width. The middle fold should be a little narrower than the envelope into which the letter is to be inserted, and a little wider than either the right or left hand fold.

Inserting the Letter

The letter is now ready to be put into the envelope. Take the envelope in the left hand with its back up and the flap opening toward the right. Take the letter in your right hand with the folded edges up. Insert first the edge folded last.

In opening a book the left-hand cover is usually opened first. Through the unconscious training of years you do this without apparent thought. Why? Because it is the natural way. The letter should be folded and put into the envelope in accordance with the preceding instructions in order to enable the person who receives it to unfold it and begin reading without loss of time.

In large business houses where hundreds of letters are received daily, the letters are usually placed on a table, back uppermost, and opened by inserting a paper knife beneath the closing fold and slitting all the way along the top edge.

In folding note paper, first fold the bottom edge up a little less than one third, then fold the top edge down a little less than one third, overlapping the bottom fold. With the envelope held in the same position as when inserting the larger

size paper, with the folded edges of the letter up, insert first the edge folded last.

The Envelope

Great care should be exercised in writing the directions on the envelope. In the first place, the name of the person to whom you are writing should appear in the introductory address of the letter just as he is accustomed to spell it, then it should be written on the envelope just as it is in the introductory address, followed in the order named by the street and house number, post office, and state. Should the name be followed by more than one title, they should be separated by commas.

The Return Card

Every letter you mail should bear your return card in the upper left-hand corner of the envelope. If the envelope bear your name and address only, the letter should be returned to you at the end of thirty days, provided it is not called for within that time. If it is desired to have the letter return to you within a specified time, provided it is not called for, the words "If not called for within — days, return to," followed by your name and address, will insure its return to you in case it is not called for. Should the envelope not bear your name and address, and remain uncalled for for thirty days, it will be forwarded to the dead letter office.

The Stamp

The stamp should be placed in the upper right-hand corner of the face of the envelope. It should be firmly attached and the edges of the stamp should be about one eighth of an inch from, and parallel to, the edges of the envelope.

The following are good models:—

(1)

Stamp

Mr. Karl L. Goodall,

Corvallis,

Oregon.

(2)

Stamp

Armour Packing Company,

Chicago, Illinois.

(3)

Stamp

Gregg Publishing Company,

151 Wabash Avenue,

Chicago, Ill.

(4)

Stamp

Mr. Harvey H. Burnham,

Cottage Grove,

Oregon.

c/o Imperial Hotel.

Form 1

Aurora, Ill., March 10, 1912.

Montgomery, Ward & Co.,
Chicago, Illinois.

Gentlemen:—

Yours truly,

.....

Form 2

67 Wabash Avenue,
Chicago, June 24, 1910.

Mr. A. P. Robinson,
211 Globe Block,
Seattle, Washington.

Dear Mr. Robinson:—

Sincerely yours,

.....

Form 3

Michigan University,
Ann Arbor, Michigan,
June 14, 1911.

Dear Frank:—

Sincerely,

.....

To Mr. Frank Huntington,
Beloit, Wisconsin.

Form 4

The Ideal Farm,
McMinnville, Oregon,
October 12, 1914.

Mr. Silas Blank,
212 Second Ave.,
Portland, Oregon.

Dear Sir:—

Yours truly,

.....

Punctuation

Carefully observe the arrangement and punctuation of the models. Notice that each part of the introductory address is

followed by a comma, except the last, which is followed by a period. The salutation should be followed by a colon and the complimentary close by a comma. The writer's signature should be followed by a period.

Capitalization

Every sentence should begin with a capital letter, and every important word of the address should be capitalized; also observe that all titles are capitalized and that the first and last word and every noun in the salutation should begin with a capital.

EXERCISE 5

Write the following headings and introductory addresses, arranging and punctuating them according to the models given:—

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The Body of the Letter

The mechanical arrangement of the heading, introductory address, salutation, body of the letter, and complimentary close can be mastered in a short time by any one who is careful and painstaking. However, the composing of the letter proper is an entirely different matter, and by far the most difficult part of letter writing, and a good style can be acquired only by careful and painstaking effort.

It is not the purpose of this chapter to give you certain forms of letters, worded in a specific way, for the various subjects about which it may be necessary for you to write. But it is rather its purpose to give you suggestions which will

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Dear Frank:—

Sincerely,

.....

To Mr. Frank Huntington,
Beloit, Wisconsin.

Form 4

The Ideal Farm,
McMinnville, Oregon,
October 12, 1914.

Mr. Silas Blank,
212 Second Ave.,
Portland, Oregon.

Dear Sir:—

Yours truly,

.....

Punctuation

Carefully observe the arrangement and punctuation of the models. Notice that each part of the introductory address is

followed by a comma, except the last, which is followed by a period. The salutation should be followed by a colon and the complimentary close by a comma. The writer's signature should be followed by a period.

Capitalization

Every sentence should begin with a capital letter, and every important word of the address should be capitalized; also observe that all titles are capitalized and that the first and last word and every noun in the salutation should begin with a capital.

EXERCISE 5

Write the following headings and introductory addresses, arranging and punctuating them according to the models given:—

1. Wise Virginia June 15, 1910 Mr. F. B, Goshen Clintwood Virginia Dear Sir
2. Berkeley Calif April 11 1910 Mrs. James P. Hadley Eugene Oregon Dear Madam
3. Raymond Washington 821 Fourteenth street July 18 1909 Mr. T B Stidham 321 Railroad Ave Doty Wash
4. 821 Second Avenue Seattle Washing May 4 1910 John P Randolph Esq 741 I street Tacoma Washington
5. Ames Iowa, Dec 23 1908 The Pure Food Grocery Co City gentlemen
6. Kalispell Mont Nov 8 1911 The Home Lumber Co Fargo N Dak gentlemen

The Body of the Letter

The mechanical arrangement of the heading, introductory address, salutation, body of the letter, and complimentary close can be mastered in a short time by any one who is careful and painstaking. However, the composing of the letter proper is an entirely different matter, and by far the most difficult part of letter writing, and a good style can be acquired only by careful and painstaking effort.

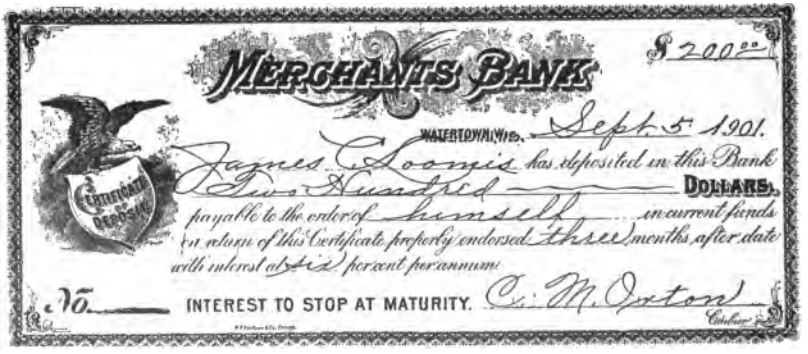
It is not the purpose of this chapter to give you certain forms of letters, worded in a specific way, for the various subjects about which it may be necessary for you to write. But it is rather its purpose to give you suggestions which will

tration, "At ten days' sight," it is payable ten days after acceptance and is called a time draft; if it reads "At sight," it is payable upon presentation and is called a sight draft. It is a bank draft if issued by one bank on another; an individual draft when issued by a firm or individual on another firm or individual. The parties to a draft are: The drawer (Bliss), who orders the payment; the drawee (Eagan), who pays; the payee (Neagle), in whose favor the draft is drawn; and the indorsers, who transfer the draft to others. The payee is always the first indorser. The indorsement should be made on the back of the left end of the draft. If merely the name is written, it is a blank indorsement and may be paid to any one upon presentation; if the indorsement reads "Pay to the order of John Doe," the amount can be paid only to the party designated by Doe and is called a full indorsement. The draft is a negotiable paper if payable "to the order of ——" or "to bearer" and is subject to the laws of negotiable instruments. When the drawee signifies his willingness to pay a time draft, he "accepts" it as shown in the model. The acceptance has the same force as the signing of a note. The law of negotiable instruments should be studied very thoroughly by every business man.

EXERCISE 13

Write the draft called for under June 11, Lesson 16.

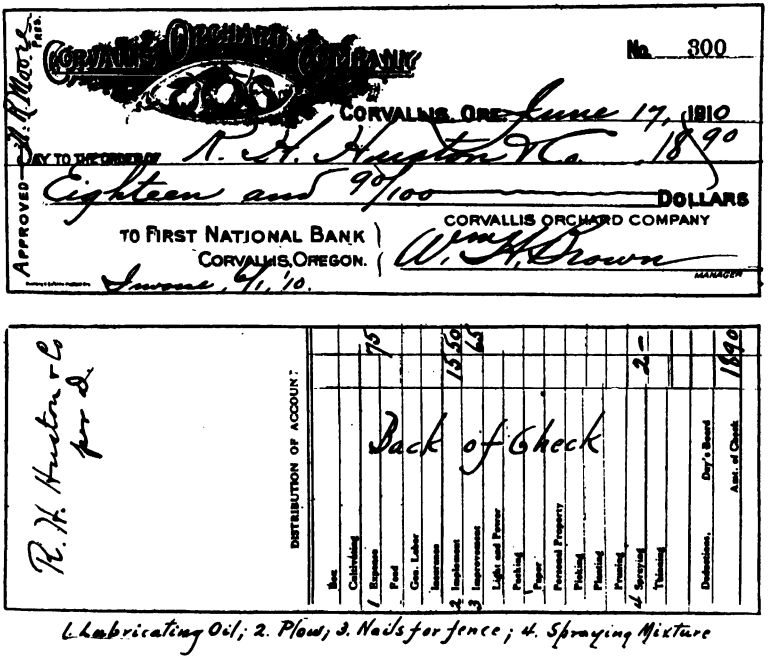
The Certificate of Deposit



A certificate of deposit is a receipt issued by a bank for a temporary deposit. It is discussed here only to emphasize the

great importance of establishing banking connections. If, for any reason, it is impracticable to open a regular bank account, as discussed on page 25, any money not needed for current use should be deposited on a certificate. If, as in the model, the deposit is allowed to remain for a definite period, interest will be allowed at the current rate. Withdrawals are usually allowed by indorsement of the amount on the certificate, but not by check. A certificate of deposit is usually issued "to the order of ——," and is therefore transferable by indorsement.

The Voucher Check



1. Lubricating Oil; 2. Plows; 3. Nails for fence; 4. Spraying Mixture

The voucher check is an exceedingly convenient form, especially in corporate business. By referring to the illustration above, it will be seen that it consists of an ordinary check on one side, with a blank for the signature of the president or some other officer authorized to approve vouchers. The bank should be instructed to refuse payment unless the check is

approved or countersigned. The back provides for the distribution of the payments, and from this the entries are made in the records. Space is left for indorsements on the left end of the back. The indorsement shown on the model constitutes a satisfactory receipt in most cases. When a definite invoice or other item is paid, it is well to specify the date or number, as illustrated. Never fail to number your checks consecutively.

EXERCISE 14

Prepare three different forms of voucher checks, modified to suit your own ideas. Let one be similar to the model.

PART IV

USEFUL TABLES

USEFUL TABLES

TABLE 1

Six Per Cent. Interest Table

	Time	$1	$2	$3	$4	$5	$6	$10	$20	$50	$100	$1000
DAYS	1	0	0	0	0	0	0	0	0	1	2	17
	2	0	0	0	0	0	0	0	1	2	3	34
	3	0	0	0	0	0	0	1	1	3	5	50
	4	0	0	0	0	0	0	1	1	3	7	67
	5	0	0	0	0	0	0	1	2	4	8	83
	6	0	0	0	0	1	1	1	2	5	10	1.00
	7	0	0	0	0	1	1	1	2	6	12	1.17
	8	0	0	0	1	1	1	1	3	7	13	1.33
	9	0	0	0	1	1	1	2	3	8	15	1.50
	10	0	0	1	1	1	1	2	3	8	17	1.67
	15	0	1	1	1	1	2	3	5	13	25	2.50
	20	0	1	1	1	2	2	3	7	17	33	3.33
	25	0	1	1	2	2	2	4	8	21	42	4.17
	30	1	1	2	2	3	3	5	10	25	50	5.00
	33	1	1	2	2	3	3	6	11	28	55	5.50
	63	1	2	3	4	5	6	11	21	53	1.05	10.50
	93	2	3	5	6	8	9	16	31	78	1.55	15.50
MONTHS	1	1	1	2	2	3	3	5	10	25	50	5.00
	2	1	2	3	4	5	6	10	20	50	1.00	10.00
	3	2	3	5	6	8	9	15	30	75	1.50	15.00
	4	2	4	6	8	10	12	20	40	1.00	2.00	20.00
	5	3	5	8	10	13	15	25	50	1.25	2.50	25.00
	6	3	6	9	12	15	18	30	60	1.50	3.00	30.00
	7	4	7	11	14	18	21	35	70	1.75	3.50	35.00
	8	4	8	12	16	20	24	40	80	2.00	4.00	40.00
	9	5	9	14	18	23	27	45	90	2.25	4.50	45.00
	10	5	10	15	20	25	30	50	1.00	2.50	5.00	50.00
	11	6	11	17	22	28	33	55	1.10	2.75	5.50	55.00
	12	6	12	18	24	30	36	60	1.20	3.00	6.00	60.00

EXAMPLE.—Find the interest on $340.00 at 8% for 8 months and 8 days.
SOLUTION: At 6% the interest on

$300.00 for	8 mos. = 3 × $4.00 or	$12.00
" "	8 days = 3 × .13 or	.39
40.00 "	8 mos. = 4 × .40 or	1.60
" "	8 days = 4 × .01 or	.04
	Total,	$14.03
Add ⅓ to produce 8%,		4.68
	Answer,	$18.71

TABLE 2

One Month to Same Day in Another

From	to Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
January	365	31	59	90	120	151	181	212	242	273	304	334
February	334	365	28	59	89	120	150	181	212	242	273	303
March	306	337	365	31	61	92	122	153	184	214	245	275
April	275	306	334	365	30	61	91	122	153	183	214	244
May	245	276	304	335	365	31	61	92	123	153	184	214
June	214	245	273	304	334	365	30	61	92	123	153	183
July	184	215	243	274	304	335	365	31	62	92	123	153
August	153	184	212	243	273	304	334	365	31	61	92	122
September	122	153	181	212	242	273	303	334	365	30	61	91
October	92	123	151	182	212	243	273	304	335	365	31	61
November	61	92	120	151	181	212	242	273	304	334	365	30
December	31	62	90	121	151	182	212	243	274	304	335	365

EXPLANATION.—To find the number of days from January 20 to December 20, follow horizontal line opposite January until you reach the column headed by December, when you will find 334, representing the required number of days, and so on with the other months. During leap year, if February enters into the calculation, add one day to result.

TABLE 3

Interest Table

The following will be found convenient in the absence of extended interest tables. To find the interest on a given sum, for any number of days, at any rate of interest:—

At 5% multiply principal by number of days, divide by 72
At 6% multiply principal by number of days, divide by 60
At 7% multiply principal by number of days, divide by 52
At 8% multiply principal by number of days, divide by 45
At 9% multiply principal by number of days, divide by 40
At 10% multiply principal by number of days, divide by 36
At 12% multiply principal by number of days, divide by 30
At 15% multiply principal by number of days, divide by 24
At 20% multiply principal by number of days, divide by 18

TABLE 4

Minimum Weights of Produce

The following are minimum weights of certain articles of produce according to the laws of the United States:—

	Lbs. per Bushel		Lbs. per Bushel
Wheat	60	Dried Peaches	33
Corn, in the ear	70	Dried Apples	26
Corn, shelled	56	Clover Seed	60
Rye	56	Flax Seed	56
Buckwheat	48	Millet Seed	50
Barley	48	Hungarian Grass Seed	50
Oats	32	Timothy Seed	45
Peas	60	Blue Grass Seed	44
White Beans	60	Hemp Seed	44
Castor Beans	46	Salt (see note below).	
White Potatoes	60	Corn Meal	48
Sweet Potatoes	55	Ground Peas	24
Onions	57	Malt	34
Turnips	55	Bran	20

SALT.—Weight per bushel as adopted by different States ranges from 50 to 80 pounds. Coarse salt in Pennsylvania is reckoned at 80 pounds, and in Illinois at 50 pounds per bushel. Fine salt in Pennsylvania is reckoned at 62 pounds, in Kentucky and Illinois at 55 pounds per bushel.

TABLE 5

Monthly Wage Table*

Days	$10	$11	$12	$13	$14	$15	$16	$17	$18	$19	$20
1.....	.38	.42	.46	.50	.54	.58	.62	.65	.69	.73	.77
2.....	.77	.85	.92	1.00	1.08	1.15	1.23	1.31	1.38	1.46	1.54
3.....	1.15	1.27	1.38	1.50	1.62	1.73	1.85	1.96	2.08	2.19	2.31
4.....	1.54	1.69	1.85	2.00	2.15	2.31	2.46	2.62	2.77	2.92	3.08
5.....	1.92	2.12	2.31	2.50	2.69	2.88	3.08	3.27	3.46	3.65	3.85
6.....	2.31	2.54	2.77	3.00	3.23	3.46	3.69	3.92	4.15	4.38	4.62
7.....	2.69	2.96	3.23	3.50	3.77	4.04	4.31	4.58	4.85	5.12	5.38
8.....	3.08	3.38	3.69	4.00	4.31	4.62	4.92	5.23	5.54	5.85	6.15
9.....	3.46	3.81	4.15	4.50	4.85	5.19	5.54	5.88	6.23	6.58	6.92
10.....	3.85	4.23	4.62	5.00	5.38	5.77	6.15	6.54	6.92	7.31	7.69
11.....	4.23	4.65	5.08	5.50	5.92	6.35	6.77	7.19	7.62	8.04	8.46
12.....	4.62	5.08	5.44	6.00	6.46	6.92	7.38	7.85	8.31	8.77	9.23
13.....	5.00	5.50	6.00	6.50	7.00	7.50	8.00	8.50	9.00	9.50	10.00
14.....	5.38	5.92	6.46	7.00	7.54	8.08	8.62	9.15	9.69	10.23	10.77
15.....	5.77	6.35	6.92	7.50	8.08	8.65	9.23	9.81	10.38	10.96	11.54
20.....	7.69	8.46	9.23	10.00	10.77	11.54	12.31	13.03	13.85	14.62	15.38
1 mo..	10.00	11.00	12.00	13.00	14.00	15.00	16.00	17.00	18.00	19.00	20.00
2.....	20.00	22.00	24.00	26.00	28.00	30.00	32.00	34.00	36.00	38.00	40.00
3.....	30.00	33.00	36.00	39.00	42.00	45.00	48.00	51.00	54.00	57.00	60.00
4.....	40.00	44.00	48.00	52.00	56.00	60.00	64.00	68.00	72.00	76.00	80.00
5.....	50.00	55.00	60.00	65.00	70.00	75.00	80.00	85.00	90.00	95.00	100.00
6.....	60.00	66.00	72.00	78.00	84.00	90.00	96.00	102.00	108.00	114.00	120.00
7.....	70.00	77.00	84.00	91.00	98.00	105.00	112.00	119.00	126.00	133.00	140.00
8.....	80.00	88.00	96.00	104.00	112.00	120.00	128.00	136.00	144.00	152.00	160.00
9.....	90.00	99.00	108.00	117.00	126.00	135.00	144.00	153.00	162.00	171.00	180.00
10.....	100.00	110.00	120.00	130.00	140.00	150.00	160.00	170.00	180.00	190.00	200.00
11.....	110.00	121.00	132.00	143.00	154.00	165.00	176.00	187.00	198.00	209.00	220.00
1 yr...	120.00	132.00	144.00	156.00	168.00	180.00	192.00	204.00	216.00	228.00	240.00

*Six working days in the week.

TABLE 6

Common Measures

Long Measure

12 inches = 1 foot.
3 feet = 1 yard.
5½ yards = 1 rod.
320 rods = 1 mile.
1 mile = 5,280 feet.

The following are also used:—

1 size = ⅓ inch.
(Used by shoemakers.)

1 hand = 4 inches.
(Used in measuring the height of horses.)

1 fathom = 6 feet.
(Used in measuring depths at sea.)

1 knot = 1.15 miles.
(Used in measuring distances at sea.)

Dry Measure

2 pints = 1 quart.
8 quarts = 1 peck.
4 pecks = 1 bushel.
1 bushel contains 2,150.42 cubic inches or approximately 1¼ cubic feet.

Liquid Measure

4 gills = 1 pint.
2 pints = 1 quart.
4 quarts = 1 gallon.
1 gallon contains 231 cubic inches.
1 cubic foot equals 7½ gallons.

Square Measure

144 square inches = 1 square foot.
9 square feet = 1 square yard.
30¼ square yards = 1 square rod.
160 square rods = 1 acre.
640 acres = 1 square mile.

An acre is equal to a square whose side is 208.71 feet.

Surveyors' Linear Measure

7.92 inches = 1 link.
100 links = 1 chain.
80 chains = 1 mile.

Gunter's chain is the unit and is 66 feet long.

Surveyors' Square Measure

10,000 square links = 1 sq. chain.
10 square chains = 1 acre.
10 chains square = 10 acres.

Cubic Measure

1,728 cubic inches = 1 cubic foot.
27 cubic feet = 1 cubic yd.
128 cubic feet = 1 cord.

TABLE 7

Housekeepers' Timetable

*, minutes to the pound. The time given is the general average; the time will vary slightly with the quality of the article. b, boiled; f, fried; bk, baked; br, broiled; s, stewed; r, roasted.

	Hours.	Min.
Asparagus, b.		15-30
Beans, b.	1	—
Beans with green corn, b		45
Beef, r.		*25
Beefsteak, br. or f		15
Beef, salted, b		35
Bass, fresh, br		20
Beets, young, b	2	—
Beets, old, b	4	30
Bread, corn, bk		45
Bread, wheat, bk	1	—
Cabbage, b.	1	—
Cauliflower, b.		30
Cake, sponge, bk		45
Carrot, orange, b	1	—
Chicken, b.	1	—
Codfish, dry and whole, b		*15
Custard (one quart), bk	1	20
Duck (tame), r	1	30
Duck (wild), r	1	—
Dumpling, apple, b	1	—
Eggs, hard b		10
Eggs, soft b		3
Eggs, f.		5
Fowls, domestic, r. or b	1	—
Goose, wild, r		*20
Lamb, b.		*20
Meat and vegetables, hashed		30
Mutton, r.		*25
Mutton, br.		20
Onions, b.		30
Oysters, s.		5
Parsnips, b.	1	—
Pork, r.		*30
Pork, b.		*25
Potatoes, b.		30
Potatoes, bk.		45
Potatoes, r.		45
Rice, b.		20
Salmon, fresh, b		8
Sausage, f.		25

	Hours	Min.
Sausage, br.		20
Soup, vegetable, b	1	—
Soup, chicken, b	2	—
Soup, oyster or mutton, b	3	30
Spinach, b.		30
Tapioca, b.	1	30
Tomatoes, fresh, b	1	—
Tomatoes, canned, b		30
Trout or salmon, b. or f		30
Turkey, br. or r		*20
Turnips, b.		45
Veal, br.		20
Venison steak, br		20

TABLE 8

Weights and Measures in Ordinary Use

3 level coffee cups sifted flour = 1 pound.
2 level coffee cups pulverized sugar = 1 pound.
1½ level coffee cups granulated sugar = 1 pound.
1¾ level coffee cups "A" sugar = 1 pound.
4 scant teacups sifted flour = 1 pound.
2 scant teacups soft butter, packed = 1 pound.
2 scant teacups granulated sugar = 1 pound.
2¼ scant teacups brown sugar = 1 pound.
8 or 10 ordinary eggs = one pound.
4 teaspoonfuls = 1 tablespoonful, liquid.
4 tablespoonfuls = 1 wineglass or half a gill.
2 wineglasses = 1 gill or half a cup.
2 gills = 1 coffee cupful or 16 tablespoonfuls.
2 coffee cupfuls = 1 pint.
2 pints = 1 quart.
4 quarts = 1 gallon.
2 tablespoonfuls = 1 ounce, liquid.
1 tablespoonful salt = 1 ounce.
16 ounces = 1 pound or a pint of liquid.
25 drops of thin liquid = 1 common teaspoonful.
1 pint of finely chopped meat, packed solidly = 1 pound.

TABLE 9

Gestation or Birth Table

Date of Service.	Mares. 340 Days. Date of Birth.	Cows. 283 Days. Date of Birth.	Ewes. 150 Days. Date of Birth.	Sows. 112 Days. Date of Birth.
January 1	December ... 6	October 10	May 30	April 22
" 2	" 11	" 15	June 4	" 27
" 11	" 16	" 20	" 9	May 2
" 16	" 21	" 25	" 14	" 7
" 21	" 26	" 30	" 19	" 12
" 26	" 31	November .. 4	" 24	" 17
" 31	January 5	" 9	" 29	" 22
February ... 5	" 10	" 14	July 4	" 27
" 10	" 15	" 19	" 9	June 1
" 15	" 20	" 24	" 14	" 6
" 20	" 25	" 29	" 19	" 11
" 25	" 30	December ... 4	" 24	" 16
March 2	February ... 4	" 9	" 29	" 21
" 7	" 9	" 14	August 3	" 26
" 12	" 14	" 19	" 8	July 1
" 17	" 19	" 24	" 13	" 6
" 22	" 24	" 29	" 18	" 11
" 27	March 1	January 3	" 23	" 16
April 1	" 6	" 8	" 28	" 21
" 6	" 11	" 13	September .. 2	" 26
" 11	" 16	" 18	" 7	" 31
" 16	" 21	" 23	" 12	August 5
" 21	" 26	" 28	" 17	" 10
" 26	" 31	February ... 2	" 22	" 15
May 1	April 5	" 7	" 27	" 20
" 6	" 10	" 12	October 2	" 25
" 11	" 15	" 17	" 7	" 30
" 16	" 20	" 22	" 12	September .. 4
" 21	" 25	" 27	" 17	" 9
" 26	" 30	March 4	" 22	" 14
" 31	May 5	" 9	" 27	" 19
June 5	" 10	" 14	November .. 1	" 24
" 10	" 15	" 19	" 6	" 29
" 15	" 20	" 24	" 11	October 4
" 20	" 25	" 29	" 16	" 9
" 25	" 30	April 3	" 21	" 14
" 30	June 4	" 8	" 26	" 19
July 5	" 9	" 13	December .. 1	" 24
" 10	" 14	" 18	" 6	" 29
" 15	" 19	" 23	" 11	November .. 3
" 20	" 24	" 28	" 16	" 8
" 25	" 29	May 3	" 21	" 13
" 30	July 9	" 8	" 26	" 18
August 4	" 14	" 13	" 31	" 23
" 9	" 19	" 18	January 5	" 28
" 14	" 24	" 23	" 10	December .. 3
" 19	" 29	" 28	" 15	" 8
" 24	August 3	June 2	" 20	" 13
" 29	" 8	" 7	" 25	" 18
September .. 3	" 13	" 12	" 30	" 23
" 8	" 18	" 17	February ... 4	" 28
" 13	" 23	" 22	" 9	January 2
" 23	" 28	" 27	" 14	" 7
" 28	September .. 2	July 2	" 19	" 12
October 3	" 7	" 7	" 24	" 17
" 8	" 12	" 12	March 1	" 22
" 13	" 17	" 17	" 6	" 27
" 18	" 22	" 22	" 11	February ... 1
" 23	" 27	" 27	" 16	" 6
" 28	October 2	August 1	" 21	" 11
November .. 2	" 7	" 6	" 26	" 16
" 7	" 12	" 11	" 31	" 21
" 12	" 17	" 16	April 5	" 26
" 17	" 22	" 21	" 10	March 3
" 22	" 27	" 26	" 15	" 8
" 27	November .. 1	" 31	" 20	" 13
December ... 2	" 6	September .. 5	" 25	" 23
" 7	" 11	" 10	" 30	" 28
" 12	" 16	" 15	May 5	April 2
" 17	" 21	" 20	" 10	" 7
" 22	" 26	" 25	" 15	" 12
" 27	December ... 1	" 30	" 20	" 17
" 31	" 5	October 5	" 25	" 21
		" 9	" 29	

How to Find the Number of Tons in a Hay Stack.

A fairly accurate rule is as follows: Subtract the width from the over (the "over" is the distance from the ground on one side over the stack to the ground on the other side), divide by two, and multiply by the width, and then by the length. We have now found the number of cubic feet in the stack. To find the number of tons, proceed as follows: For a stack twenty days old, or under, divide by 512; between twenty and sixty days old, divide by 422; over sixty days old, divide by 380.

A more accurate rule for finding the number of cubic feet is as follows: Subtract the width from the over; divide by the height, then multiply successively by the over, the width, the length, and by .225. The tons are then found as above.

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* Two or three column journal paper.
** Common ledger paper.

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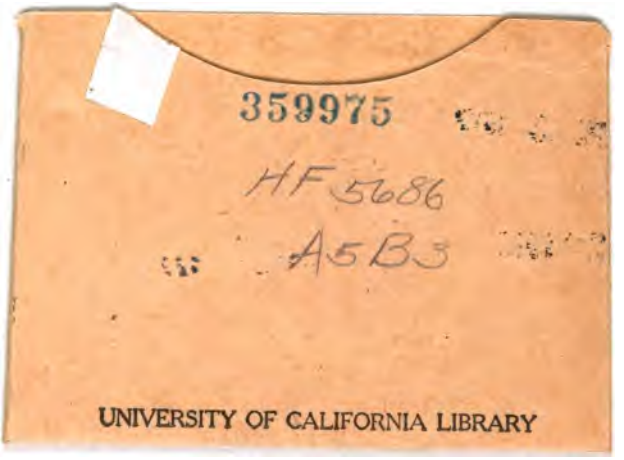
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